TECHNICAL REPORT

Gesab®

guarantee for the future

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General specifications

The new generation of ACTEA consoles is based on the extremely versatile UNLIMITED FRAME modular chassis. This new chassis allows to generate unlimited configurations according to the needs of each project without affecting the high capacity and performance features of the console, and providing great flexibility in adapting the console to the needs of the operator, environment and system.

ACTEA ATC

ACTEA model specifically designed for air traffic control. The large front allows us to integrate all the display equipment and accessories needed in this type of environtment.

ACTEA MISSION

ACTEA model with upper column for housing display systems. ACTEA MISSION creates a delimited space for greater user privacy and a more integrated management of the display equipment.

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ACTEA SLIDE

SLIDE is the most minimalist and versatile ACTEA model.Ergonomic enhacement systems for display screen are integrated on the low-profile column, offering the same ergonomic improvements, but with a more open and light design..

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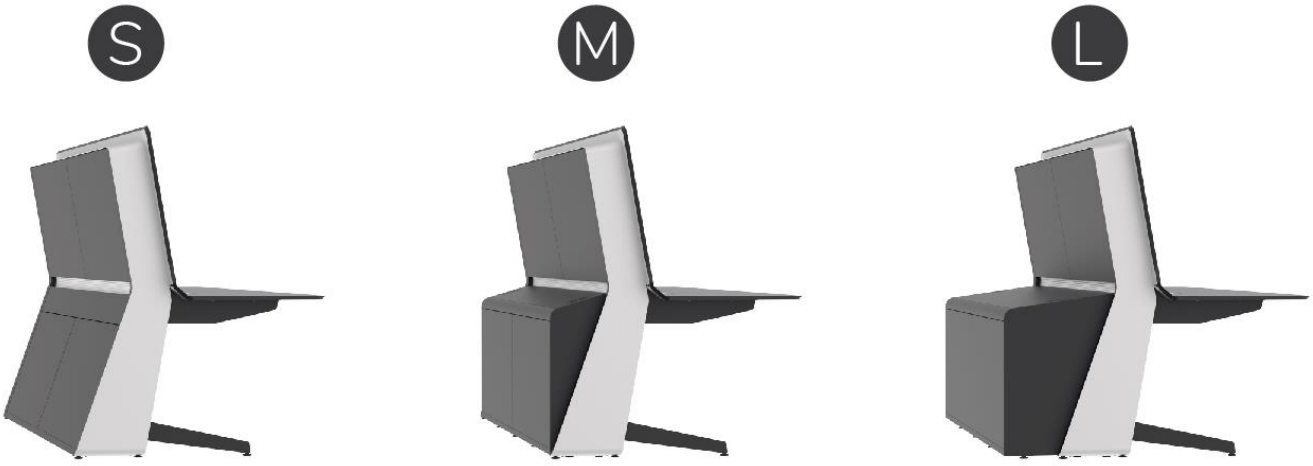
1. UNLIMITED FRAME

One of the most important innovations in the new generation of ACTEA is the modular and unlimited design of the UNLIMITED FRAME chassis. The innovative structural chassis offers an extremely versatile platform with the highest adaptability on the market in closed type control consoles, with the compartment integrated in the structure, and without affecting the high capacity and performance features of the ACTEA series.

The structural frames together with the central beam create the chassis of the ACTEA series. Each model provides differentiated features according to the needs of the project and especially of the necessary equipment in each operative position.

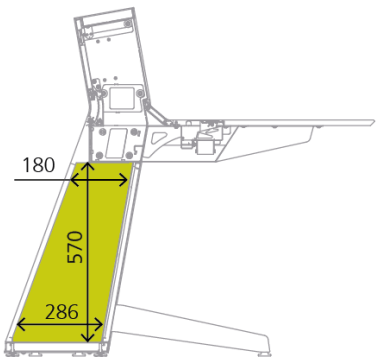
In addition to the chosen chassis model of the ACTEA series, there are 3 models of technical compartment that vary according to its total capacity to accommodate equipment.



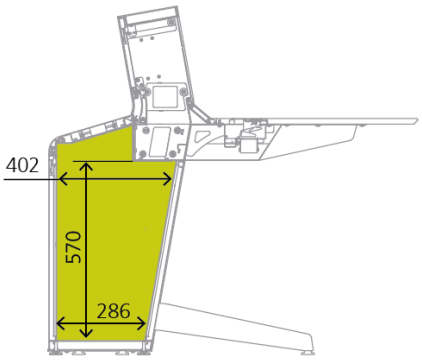
S Compartment. The equivalent to the internal capacity of the UNLIMITED FRAME chassis with internal measurements of 286mm deep at the base and 570mm of useful height. The minimalist design of this option is integrated in the frame and creates a sloping surface, where we are able to install 2 19" equipment units independently at different heights.

M Compartment. It perfectly balances the defining high capacity and minimalist aesthetics of the ACTEA series. The compartment creates an inner space of 286mm deep and 570mm high, maintaining the capacity throughout the vertical and integrating 19" equipment with a maximum capacity of up to 12 units per internal section of the compartment.

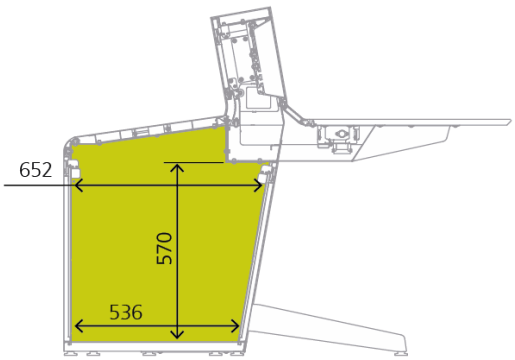
The **L Compartment** is the option with greater capacity. In this L version, the entire depth available up to 536mm throughout the height is increased, being able to integrate large equipment, workstation both desktop as rack-mounted, or solutions with a high density of equipment per operator. The compartment accessories, as well as ACTEA AIRFLOW system, allow to design high-density solutions without affecting the performance of the equipment.



S Compartment

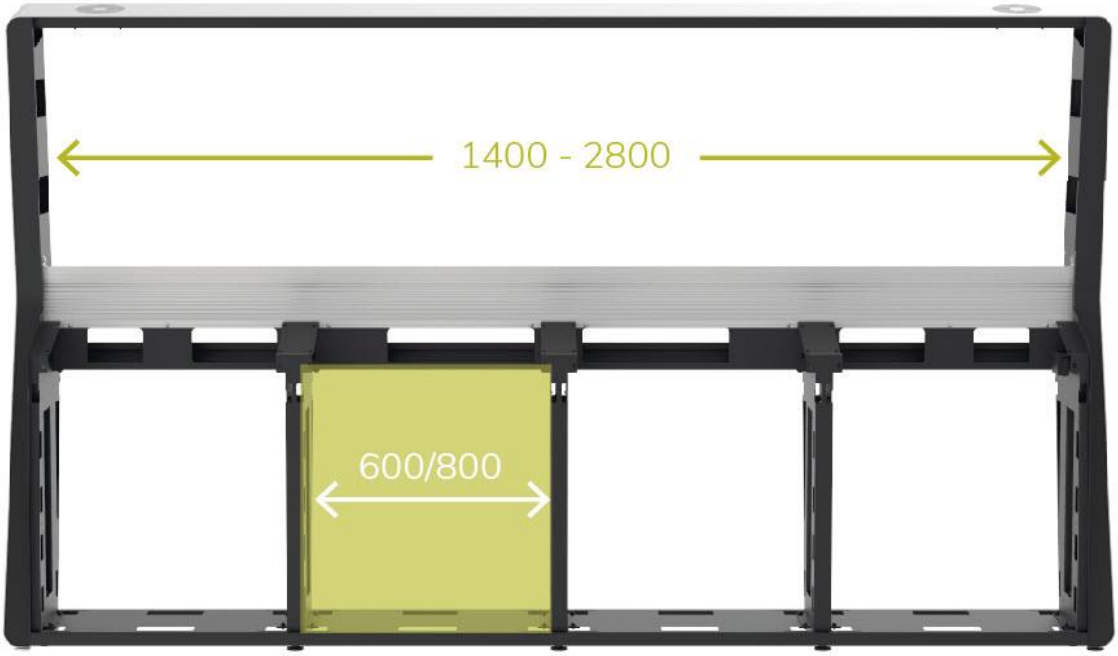


M Compartment



L Compartment

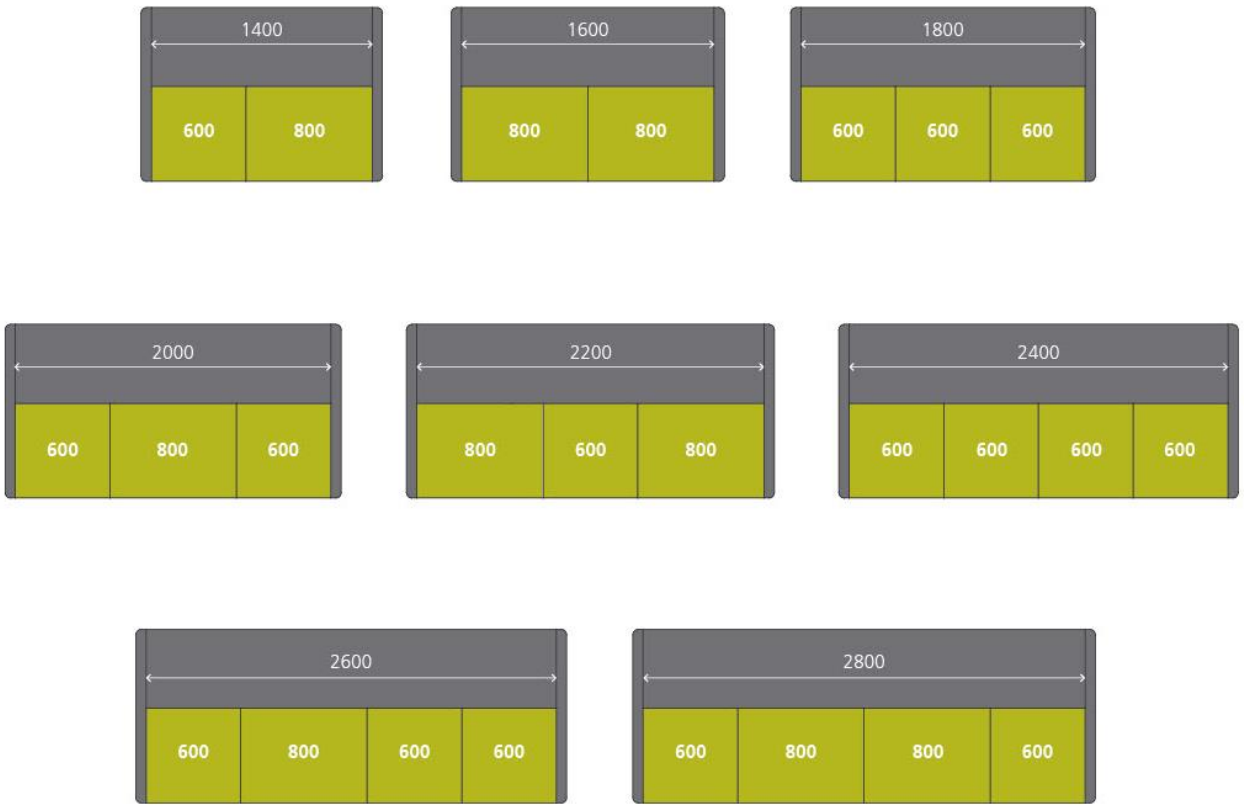
In addition to the UNLIMITED FRAME chassis model and compartment capacity (S/M/L), the ACTEA series is available in a wide **range of lengths**. The modular design of the console is determined by the capacity and distribution of the different sections of the compartments, for that reason the total length, number and measurements of the compartment's internal sections are directly related.



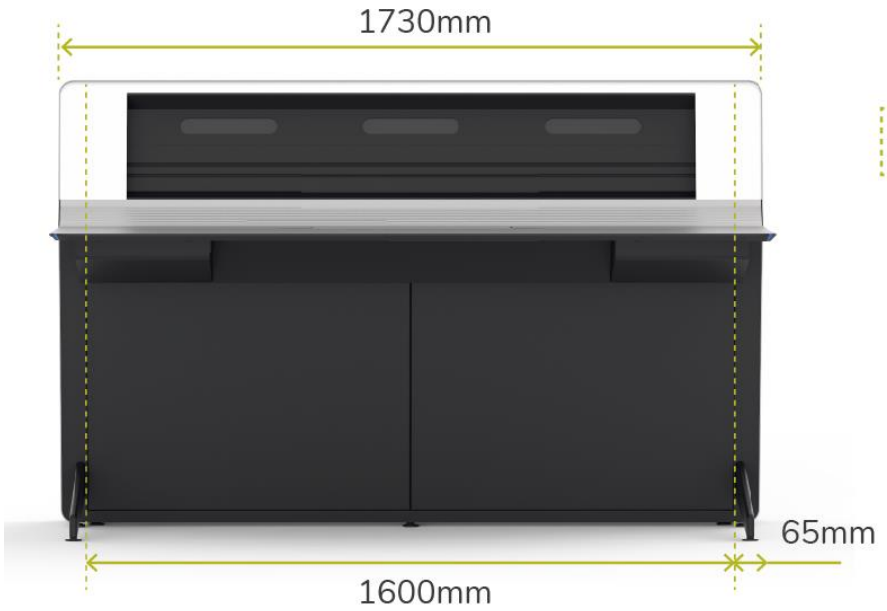
The internal structure of the compartments is divided into 19" sections compatible with all accessories available from ACTEA for the improvement and optimization in the management of equipment and wiring. The internal division will be 600 and/or 800mm, depending on the compatibility that the total length of the selected structure provides. See the diagram on the following page for the relationship between total compartment length and internal sections.

The standard lengths available will be between 1400mm and 2800mm, with increases of 200mm between standard modules, due to the standardized measurements of the 19" sections.

Below is a diagram with the standard distributions of the internal sections of the compartment according to the console lengths. This diagram is independent of the selected ACTEA model and compartment capacity:



In order to make the useful compartment capacity in each console more comprehensible, the measurements in the product descriptions correspond to the measurement of the compartment and not to the general dimension of the console.



1600 STRUCTURE MEASUREMENT

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130 SIDES MEASUREMENT (X2)

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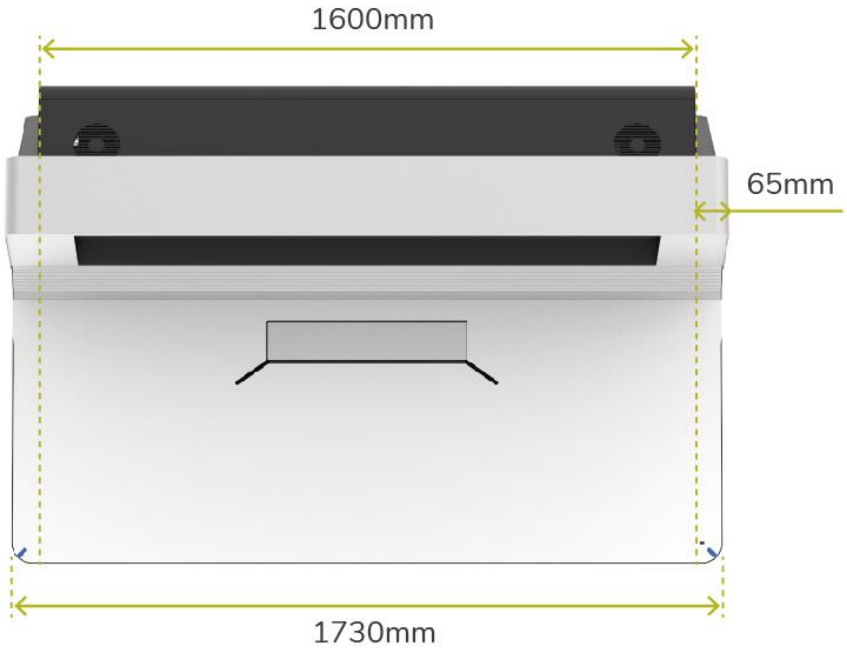
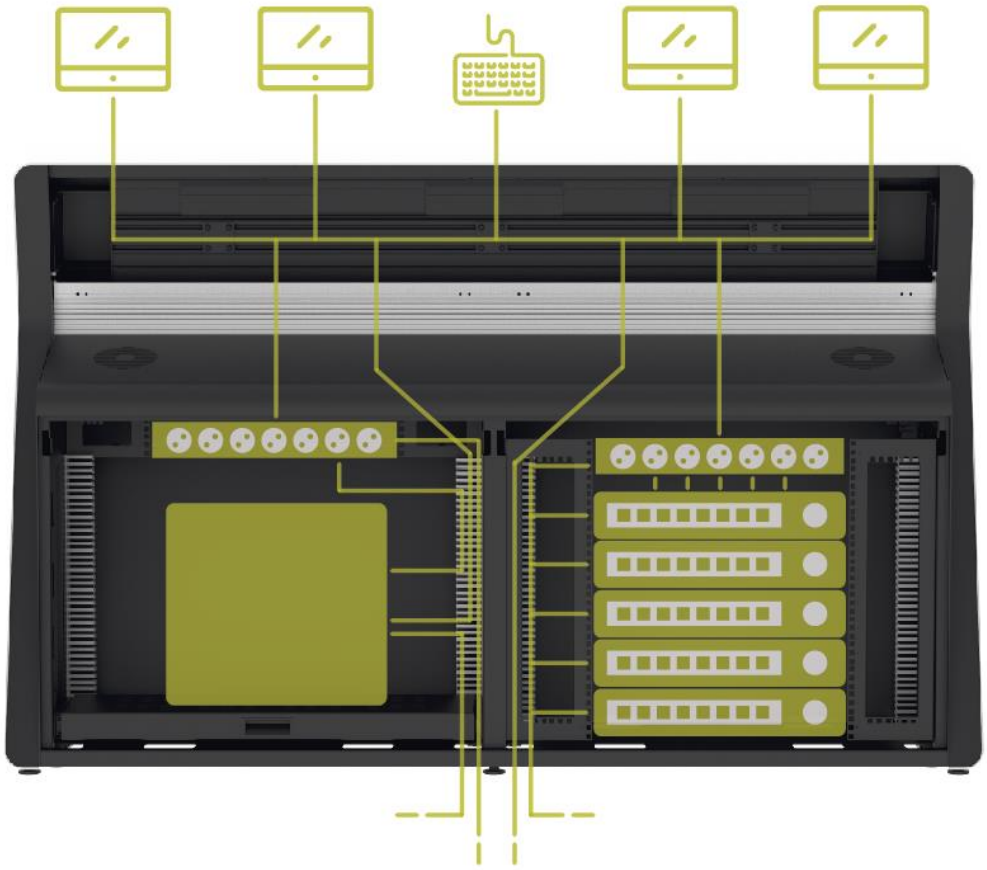
1730 TOTAL MEASUREMENT

The overall length of the console will be the sum of the selected compartment's measure plus the sum of the sides (2 units by default) corresponding to 130mm in total.



2. HIGH PERFORMANCE

One of the main features of the ACTEA series is the great storage capacity and the extreme optimization of the space, which allows to create designs with a high density of equipment and the highest possible yield. ACTEA has been designed to provide solutions to those projects where storage capacity and equipment and wiring management are critical. For this reason, ACTEA's new generation has improved and optimized the management of all technical elements, offering solutions designed so that the tasks of installation and maintenance are as comfortable and simple as possible. Density of equipment, comfort and ease of management, organized wiring and a high capacity of ventilation are the bases of the new design of the ACTEA series, ready to offer the highest performance in all the projects.



Each section of the compartment (600/800) can integrate a series of accessories specifically designed for the ACTEA series, optimized to offer the highest possible capacity, but without affecting the ergonomics of the installers or maintenance team. The compartment is directly connected to the central beam, which in addition to its structural function, serves as the distribution channel of the wiring along the console. From the central beam, we have direct access to the upper column where we will install the display equipment, ergonomic systems and specialized equipment.

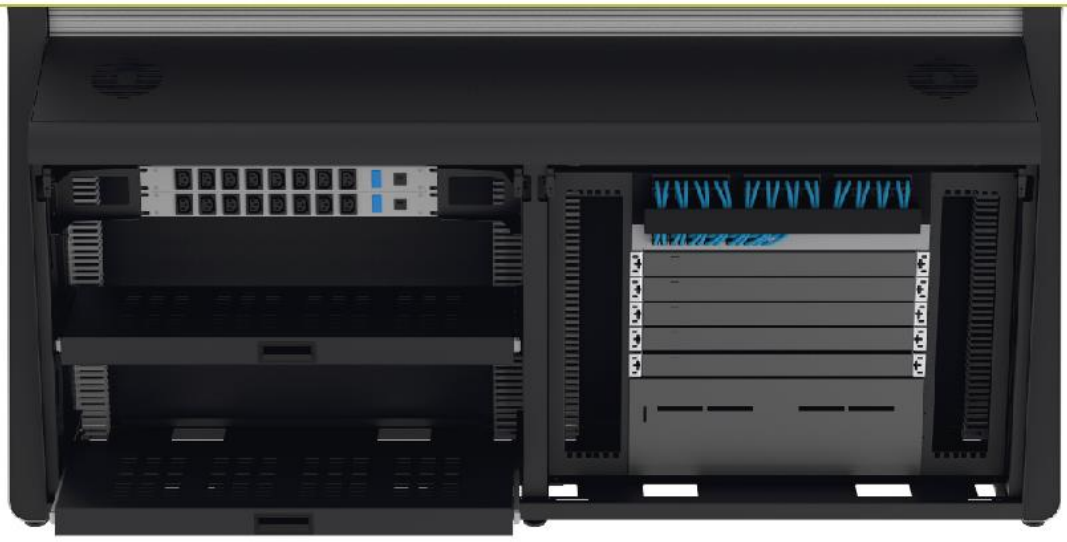
The new version of the ACTEA series has been designed with the focus on the versatility, optimization and performance of the technical areas. In all models of the ACTEA series, the technical areas of the compartment can be accessed from both the front as rear areas, allowing a greater freedom when locating the consoles in a room regardless of the model or configuration. Although the design offers comprehensive access to the compartment, it is advised, whenever possible, that all installation and maintenance work is planned from the rear access points, as this will avoid interference with the operator's working area and will make the implementation of hot maintenance tasks easier.

The large capacity of the technical compartments together with the careful selection of available accessories allows to maximize the space available in the room, allowing a high density of equipment in each console, optimizing the performance of the equipment and making its installation and maintenance easier.

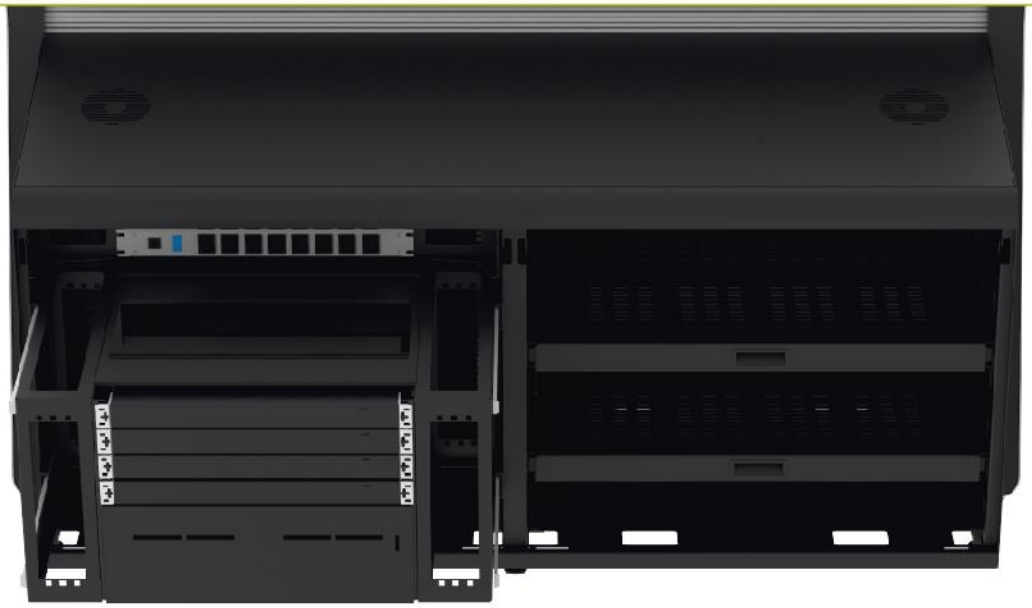
L compartment with removable tray.

M compartment with 19" support

The optimization of space and the ability to adapt each console to the needs of the project has been one of the main focuses in the engineering of the product. The modular design of the accessories allows to create the internal configuration of the compartment that best suits the equipment and requirements of the project with the quality and design of GESAB.



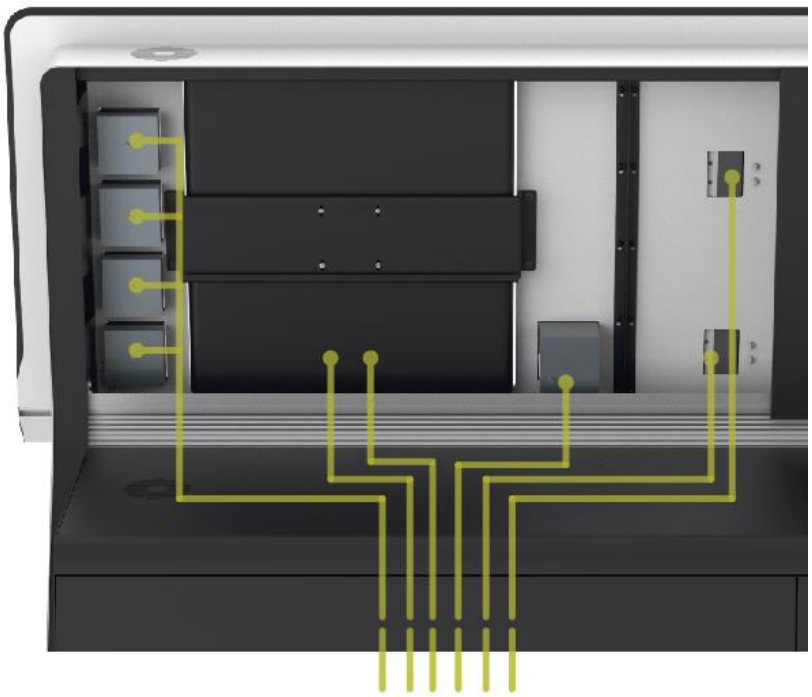
The accessories are compatible and interchangeable with all consoles of the ACTEA series, as well as with the different versions of compartment capacity (S, M, L) and measurements of the 600 and 800mm internal sections.



The same design designed to provide maximum adaptability and optimization focused on performance improvement is applied in the upper part of the structure. The top column, especially in the ATC and TOWER versions, is designed so that any equipment required for the operator's interaction, whether large format screens, ergonomic arms, radio equipment or any other type of specialized equipment can be fitted and adapted. The composition is totally integrated in the design of the console, without external elements that can cause failures in the system and with easy and comfortable accesses for management and maintenance.

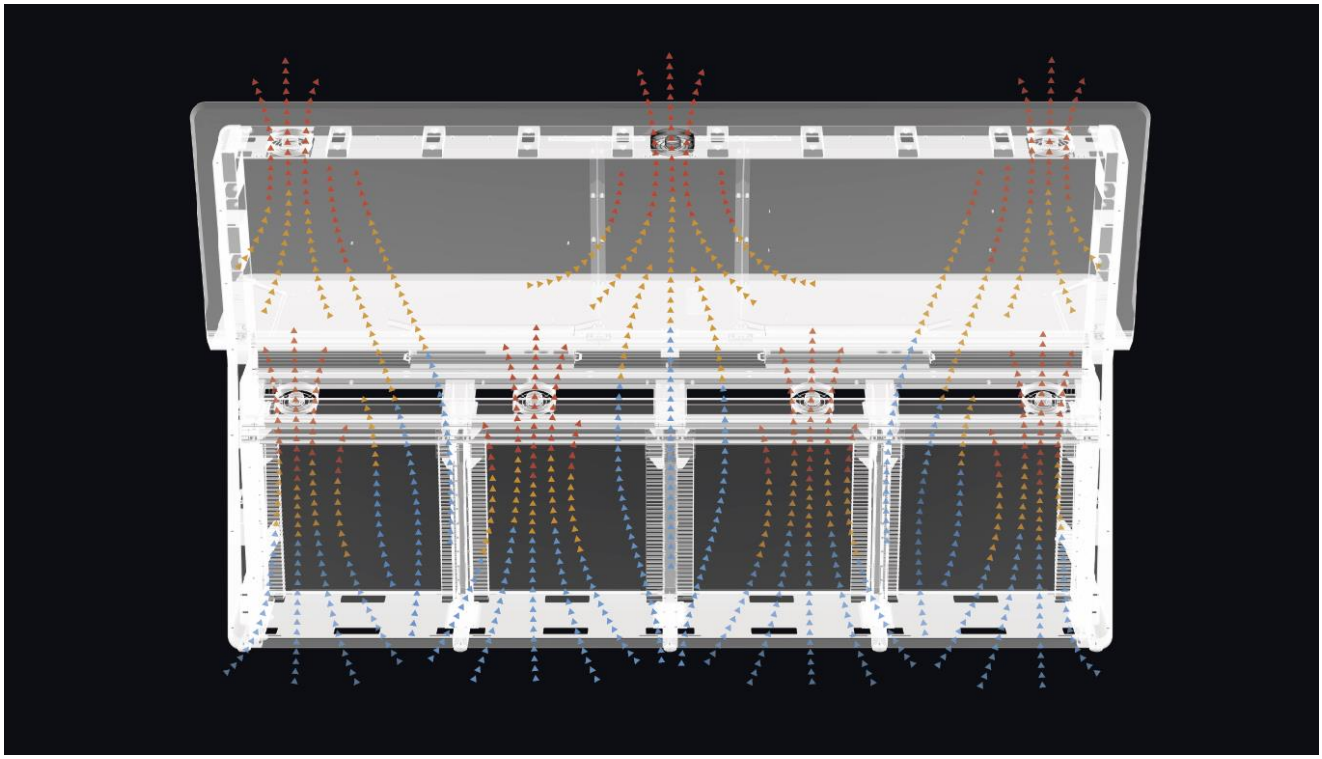
Front view of equipment in the ACTEA ATC top column

Rear view of equipment in the ACTEA ATC top column



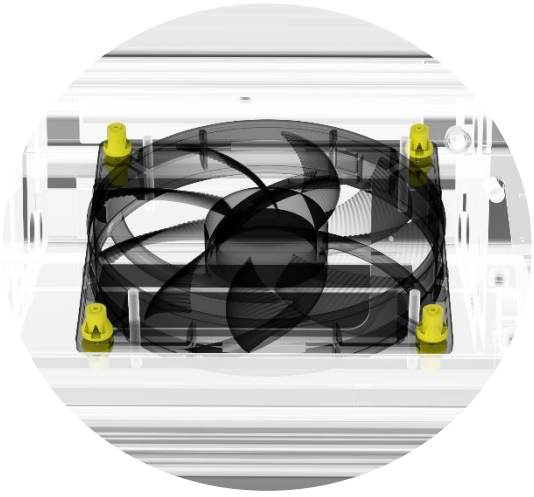
3. AIRFLOW SYSTEM

With the AIRFLOW system of the ACTEA series the air circulates at the perfect rate providing the adequate level of cooling even in the most demanding configurations. Thanks to the powerful ultra-quiet fans located in strategic areas of the console, air circulates throughout the technical area of the equipment, and expels the hot air outwards without affecting the adjacent consoles or the operator.



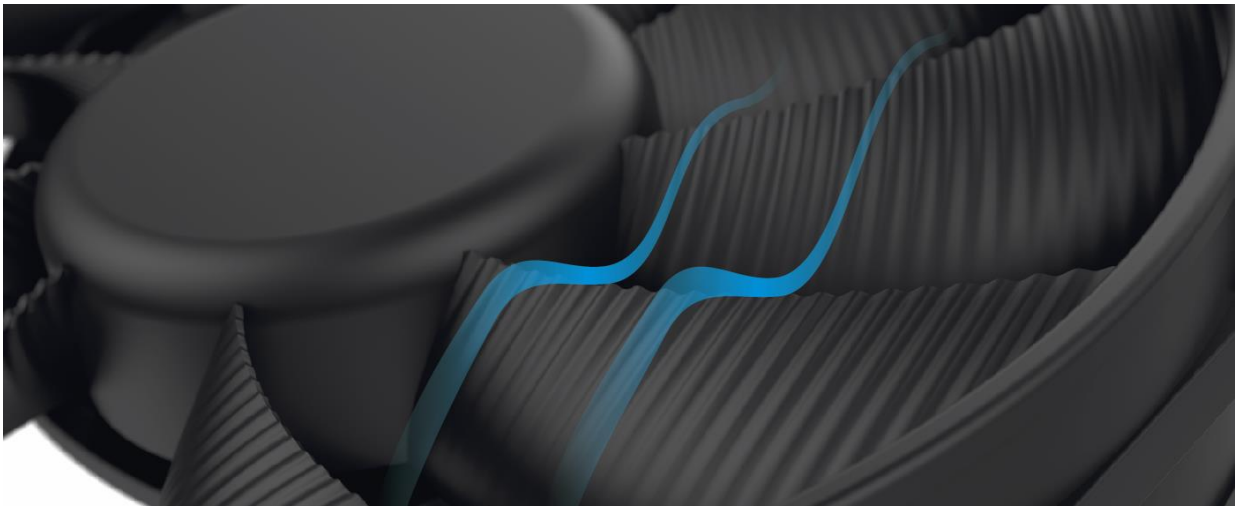
Thanks to ACTEA's AIRFLOW system, it is possible to carry out configurations with a high density of equipment without its performance being reduced due to the internal temperature of the compartments.

Due to the high concentration of consoles and equipment with fans in critical environments such as control rooms, it is vital to keep noise to a minimum with ultra-quiet ventilation systems. The high-capacity fans that integrate the ACTEA series incorporate 3 key technologies to provide inaudible noise levels: cushioned bearings, silent-wings and dynamic fluid bearings

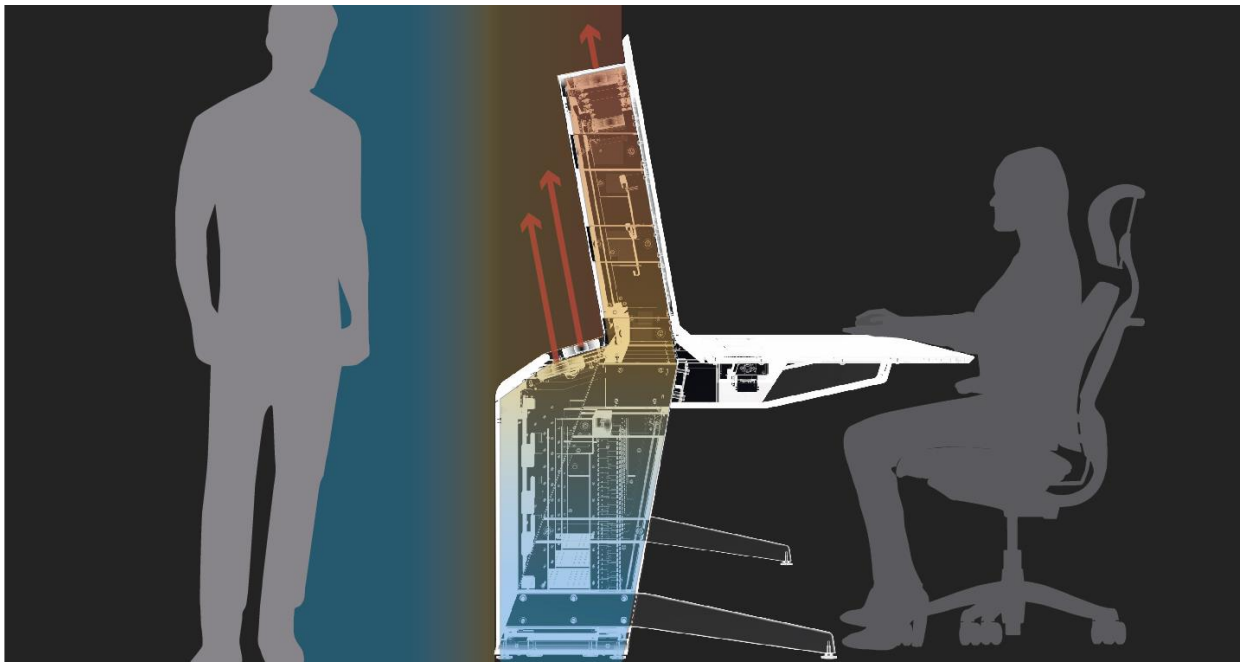


The joint of the fans in the structure of the console is made through **cushioned bearings** that eliminate the possible vibrations generated by the movement of the fan.

Thanks to the **silent-wings** technology applied to the fan blades, the air flows through the surface generating the minimum friction possible, drastically reducing noise levels, along with the smooth-running motor with **6-pole shaft** and **dynamic fluid bearings**. These 3 technologies of the ACTEA series fans are key to achieve virtually inaudible noise levels with a maximum of **16.4dB(A)** and a total fan capacity of **86 m3/h** which ensures perfect air circulation inside the ACTEA compartments.



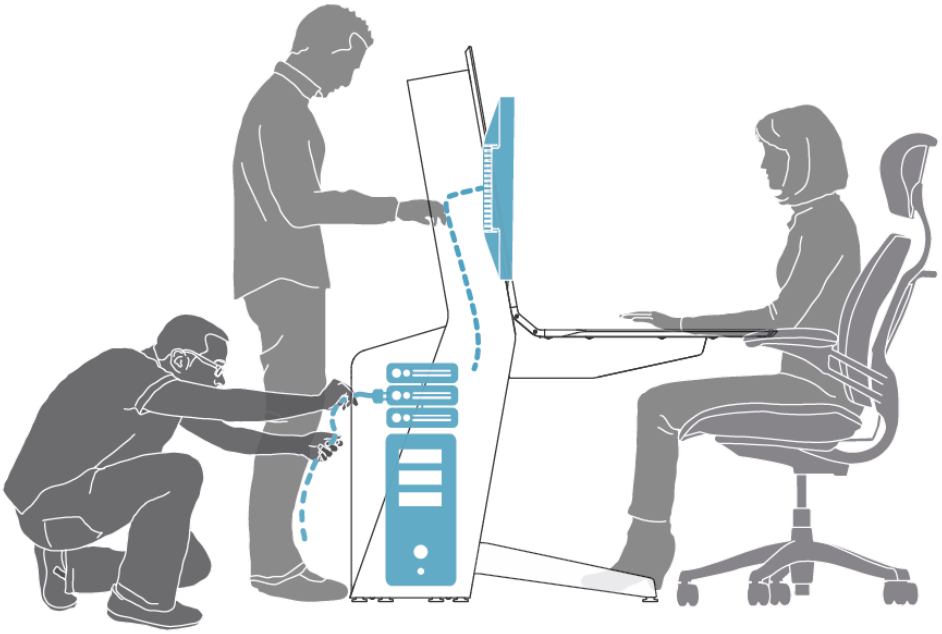
The AIRFLOW SYSTEM has been designed down to the smallest detail. Hot air extraction is carried out vertically and through the back of the console to ensure that it cannot cause discomfort to operators, especially the main user of the console, but also to people who may be near, as in room configurations where they are distributed in rows.



4. ERGONOMICS

In control rooms, critical processes and information are managed for the correct operation of complex systems both industrial as of security or traffic, and sometimes even dangerous situations are managed, for these reasons ergonomics plays an essential role in this type of environment guaranteeing levels of usability and performance well above the standards of other sectors.

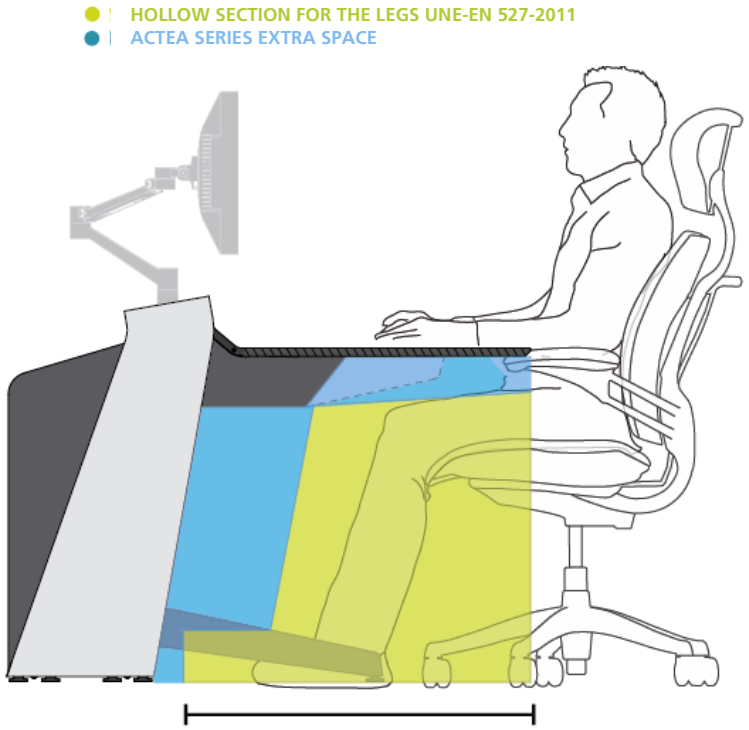
The ACTEA design has been thought to offer the best experience and usability to the user, putting special attention in the aspects related to the ergonomics and the health of the operator. At GESAB, we not only meet the basic ergonomic regulations, but also the ergonomic capabilities of the product are extended to offer the operator the best possible tool to perform his tasks and improve his health.



The ACTEA series has been designed using a concept of global ergonomic improvement, not only operator-centered. During the design, development and engineering phase, GESAB applies holistic ergonomics guidelines, substantially increasing the user experience with both the product and the environments where they are integrated. With this approach, the entire chain of possible users is kept in mind from the design phase, so as not to leave any detail at random and control the greatest number of possible variables during the life of the product in order to avoid problems of operation and make the work to all the professionals involved in the activity of these critical environments easier.

At the same time, compliance with the specific regulations for ergonomics in control rooms (UNE-EN ISO 11064) is another key point to ensure that the operator has adequate working space to perform his tasks, both in free space as in physical and visual comfort.

The design of the primary space with which the operator interacts is common to the entire ACTEA series, the most significant changes between models correspond to the area of the upper column and the area of the rear compartment that do not interfere in the primary area of the operator.

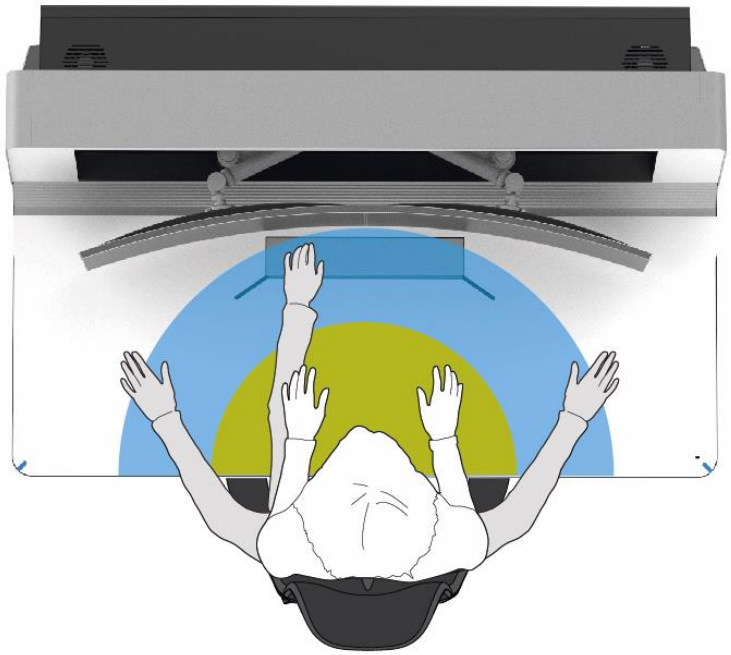


In all the wide variety of models and measures of the ACTEA series the minimum basic measures are fulfilled to guarantee an optimum work space. The ACTEA series has been certified in the UNE EN ISO 527 standard by an independent external laboratory that guarantees its compliance.

Innovation and design focused on the continuous improvement of ergonomics. Over the years, GESAB has been developing new improvements in the field of ergonomics based on studies and on the experience gained in the carried-out projects, in direct contact with the needs of the users.

Tools like the Personal Dock that shape the functional needs and from the most demanding ergonomic requirements to obtain the highest satisfaction and the best possible use experience with the least effort. All the elements are strategically arranged to enhance the intuitive use of the set.

All the elements are located and designed in a way that allows an easy and comfortable access and interaction, keeping an open-plan and without distractions work space that could affect the tasks in critical environments. In the primary and secondary scope areas, the main elements of interaction are distributed to increase the user's performance and comfort.



The display systems are one of the most important elements in control rooms, since they show the information of the critical processes and systems that they control. In that sense, the solutions integrated in the consoles must offer a high compromise between adaptability, usability and safety.

Exceeding market standards, GESAB has developed a series of ergonomic display systems specially designed for critical and high-performance environments, for projects where standard ergonomic arm solutions are not enough.

VISUAL ERGONOMICS FOR VIDEOWALL SOLUTIONS

VISUAL ERGONOMICS FOR SOLUTIONS WITH LARGE FORMAT MONITORS

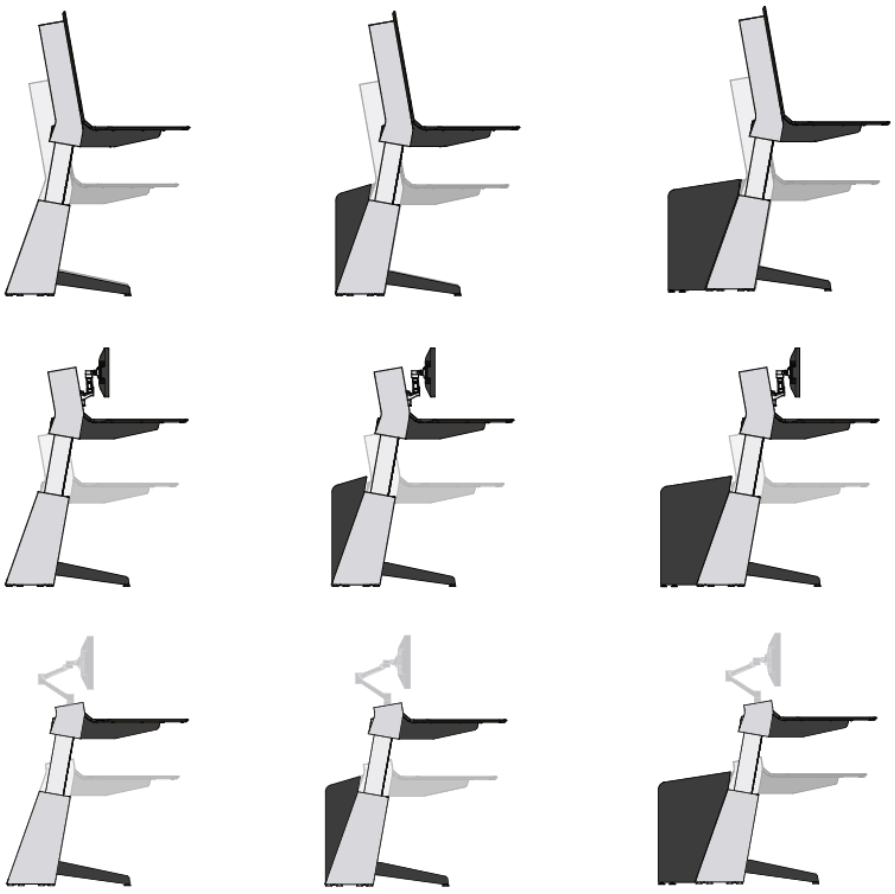
The wide range of possibilities provided by the ACTEA series guarantees the best solution whatever the necessary display system. From multi-display layouts in environments with video wall systems to new solutions based on large-format displays where all information is viewed and shared, ACTEA's ergonomic display systems offer the best possible solution for every project.

5. ACTEA SERIES and ACTIVE CONTROL

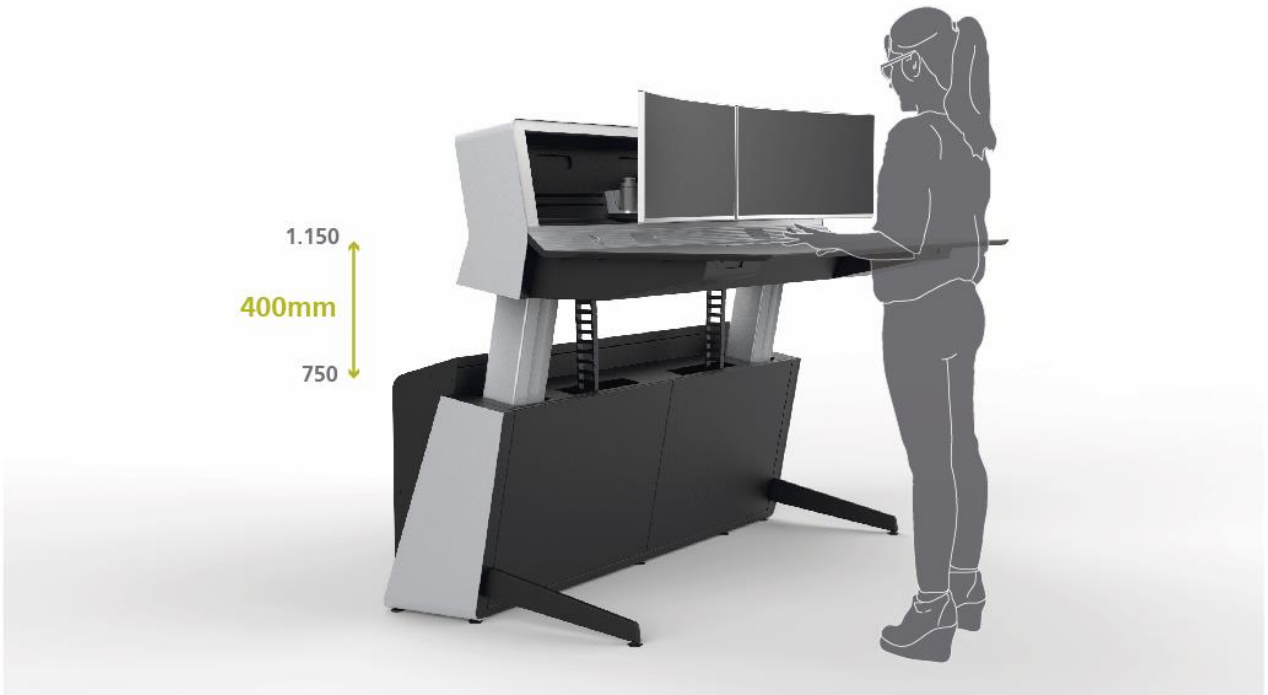
The ACTEA SERIES design has been thought to offer the best experience and usability for the user, paying special attention to the aspects related to the ergonomics and the health of the operator.

The main organizations specialized in ergonomics and occupational health recommend to promote the mobility in the work place to favor the physical activity and in this way to counteract the negative effect of the incorrect work positions that are acquired during the day. One of the main problems of the jobs based on a static space (main work with display screens) is the limitation of movement and activity of the body, which causes the vast majority of long-term injuries to the people who perform this type of tasks.

With the goal of providing solutions that improve the health and performance in critical environments and control rooms, the new ACTEA series, thanks to its innovative UNLIMITED FRAME chassis, allows any model in the series to integrate the Sit&Stand technology without any equipment and dimensions restrictions.



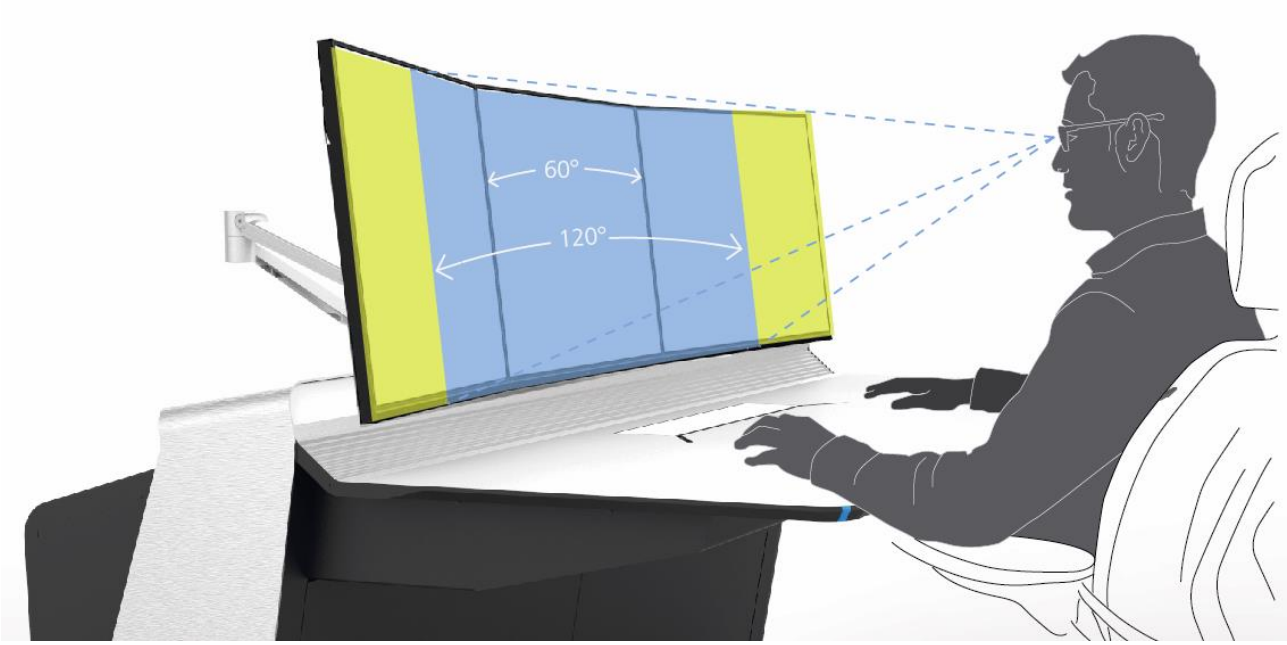
GESAB has applied the concept of Active Control, which provides elevated high-performance consoles in order to carry out control tasks from an upright position, promoting the activity and physical movements of the operator, with the aim of improving the ergonomics and health of the users. The lifting ability of the work surfaces is the optimal solution for 24/7 high performance environments.



6. ERGONOMIC DISPLAY SYSTEMS

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

GESAB has designed and developed a specific solution for each ACTEA model with the aim of developing the most complete and versatile range of the market covering all current and future display needs. The WiRail MISSION, WiRail SLIDE systems or the FREEWALL from ATC improve the physical and visual ergonomics, helping to reach the maximum potential of the different display configurations of each project.



DESKWALL AND ACTEA SERIES

Control centers have changed radically in recent years, requiring more advanced tools than the current KVM platforms. Operators need more dynamic, ergonomic, flexible and collaborative solutions that allow them to have absolute control, protecting their health.

DeskWall allows the management, administration, control of equipment and sources of information by means of a single keyboard and mouse in a revolutionary concept: the multi-canvas. GESAB has created a new working philosophy that gives the operator the ability to create, with absolute flexibility, a screen space of up to 8K where he can organize all his applications, programs, displays, app, smart apps, web services, IP video, streaming, social networks or widgets.

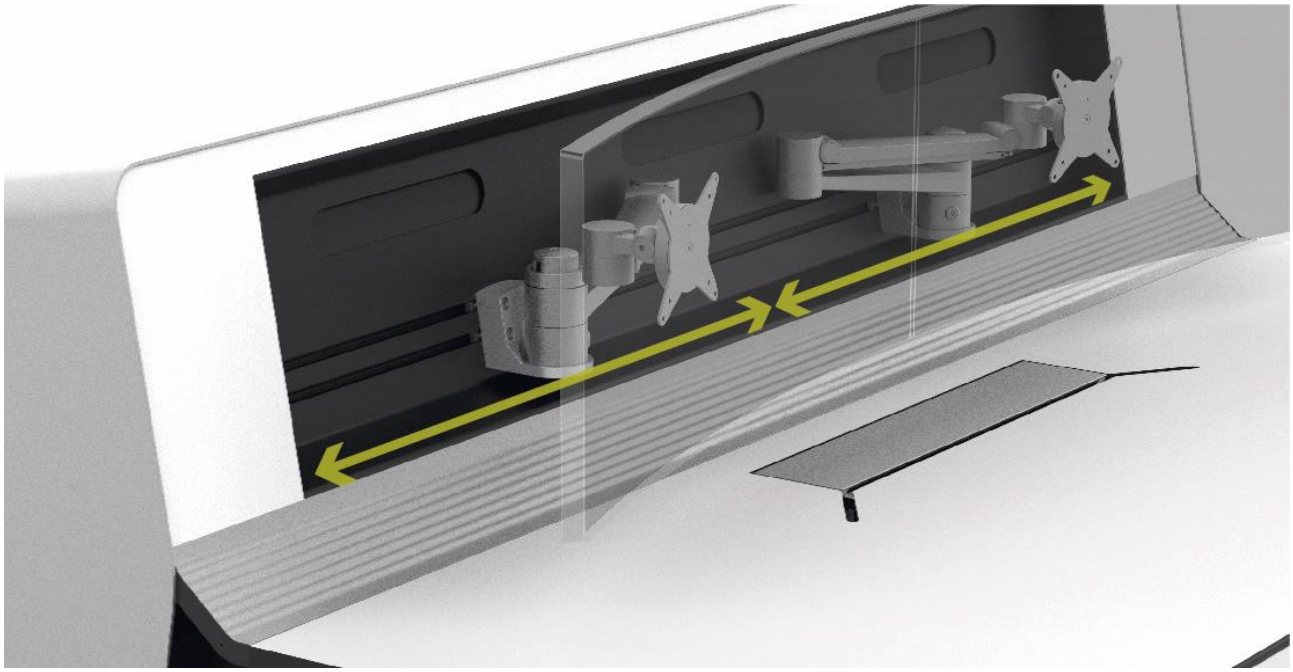
ACTEA is the first control platform that allows standard coupling of curved large format screens. The simplification of several independent monitors on a single screen with DeskWall where different layouts can be adapted according to the room's display needs will be the future of the control rooms and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

ACCESSRAIL MISSION SYSTEM

Fully integrated system in the upper column of the ACTEA MISSION series. The exclusive system designed for the MISSION series allows the ergonomic arms to be located inside the upper column, so that the work space and the regulation ability are optimized to the maximum, and the arms are hidden in the inner space of the console.

The set is made of aluminum profile with high-quality anodized finish. The profile system offers a track where ergonomic arms are installed with the added advantage of longitudinal regulation throughout its length, as well as cable gland areas for the communication of the wiring to the interior of the structure, in an organized and clean way.

The components designed in aluminum profile allow to create configurations for ergonomic without length limitations, adding a new dimension of regulation and with excellent finishes between the joint of the different elements of the set. Stylish design and optimized ergonomics for the ACTEA MISSION series.



WIRAIL SLIDE SYSTEM

Special regulation system for ergonomic arms for the ACTEA SLIDE series. Fully integrated inside the upper part of the structure, the WIRAIL SLIDE system allows to install any ergonomic arm in a simple and integrated way with ACTEA SLIDE. The assembly allows the additional longitudinal regulation in the console, adding a dimension to the adaptive ability of the ergonomic arms. By being integrated in the structure of the console, the wiring is totally hidden and channeled directly towards the technical area of the compartment. To facilitate the installation and maintenance, an easy and comfortable access has been designed from the upper area through an integrated pivoting cover with movement retention. Increased ergonomics and minimal design in the ACTEA SLIDE series.

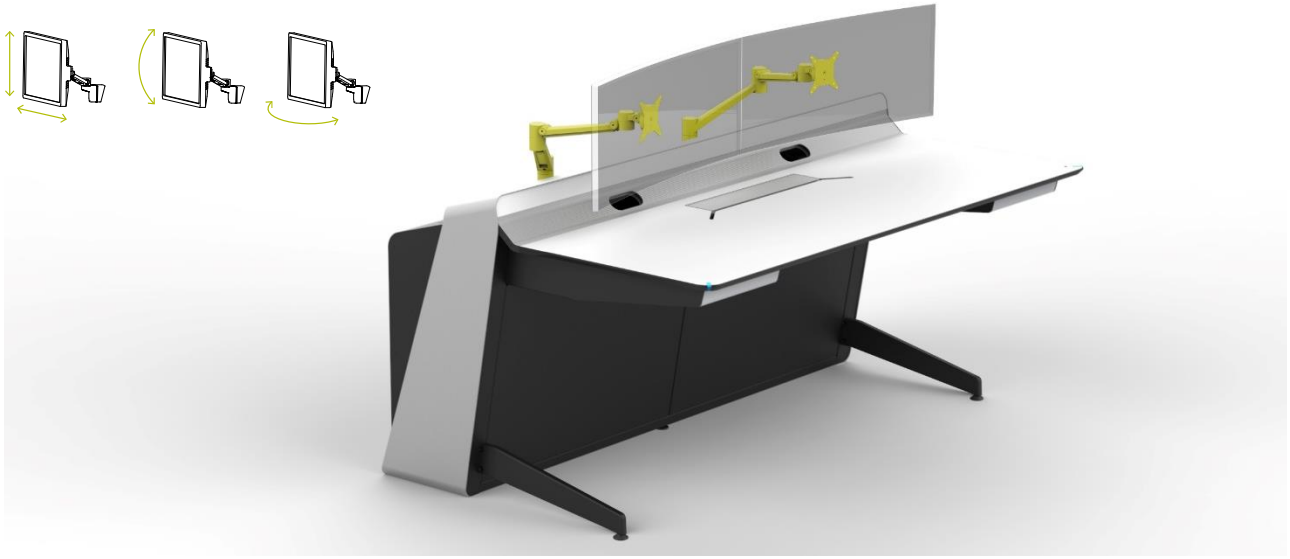
FREEWALL ATC SYSTEM

ACTEA ATC is defined by offering greater capacity in the operator's main display area, designed for environments where a large number of display equipment is installed per operating station.

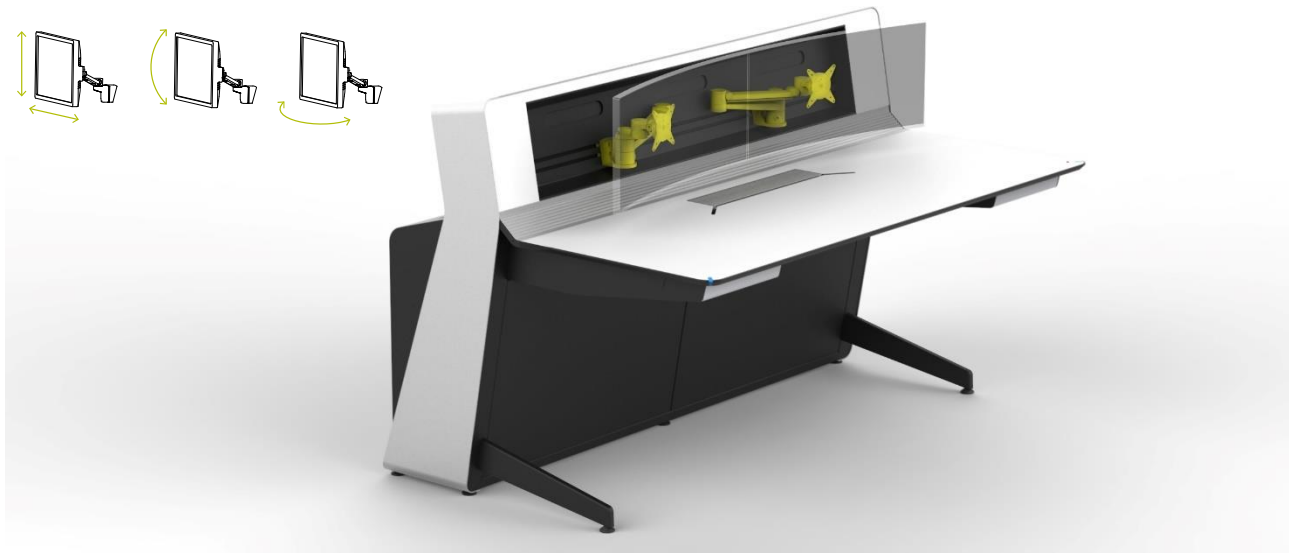
In order to offer the best solution in every project, ACTEA ATC, besides offering a large display front and with a high capacity to accommodate equipment, allows a totally free and customizable configuration according to the specific needs of each project. All the display front is a free space to design the layouts that offer the best performance and ergonomics for the user in each case.

ERGONOMIC ARMS

The ACTEA series has been designed taking into consideration the highest standards of ergonomics and UX for the operator. For this reason, all ACTEA models are optimized for the standard installation of ergonomic arms, so that the operator can easily and conveniently regulate the position of the screens according to his anthropometric needs.



The ergonomic arms allow the adjustment of the position of the monitor without tools. Generically they offer vertical, horizontal, inclination and rotation regulation. Although the location of the monitors will be conditioned by the layout of the system, the ergonomic arms along with the increased regulation capabilities offered by the ACTEA series, will allow to find the best solution in each project.



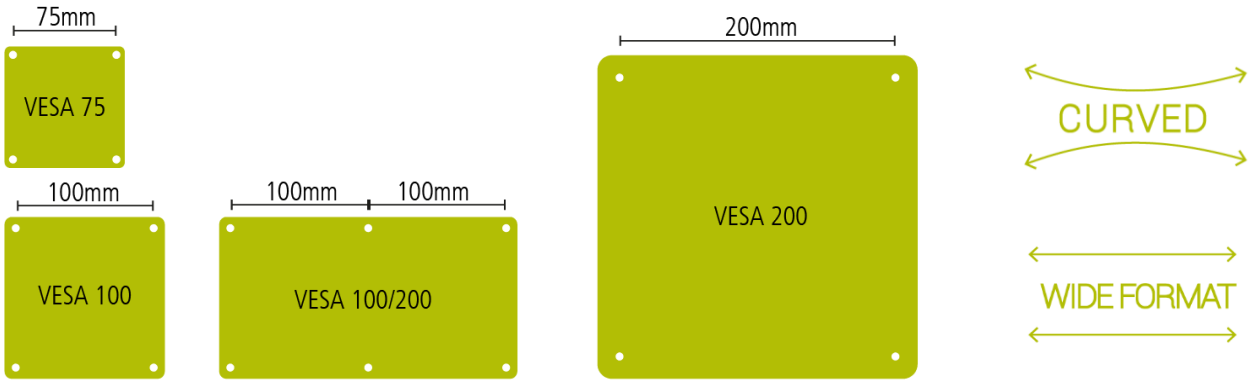
SUPPORT FOR LARGE FORMAT

GESAB is committed to future solutions such as DESKWALL, where it is possible to unify and simplify traditional configurations of a large number of monitors, to fewer large format screens and with increased functionalities compared to traditional systems.

The integration of large-format and ultra-panoramic displays is GESAB's commitment to future control rooms, and the ACTEA series is already prepared for the new technologies.

By means of specially designed supports developed by GESAB it is possible to install large screens up to 65" 4K (DeskWall ergonomic recommendation) throughout the product range of the ACTEA series.

The large format display system can integrate any screen up to 65" in any of the standard VESA formats from 75mm up to 200mm. For special displays, such as radar monitors or air traffic control, check the weight limitations for proper operation.

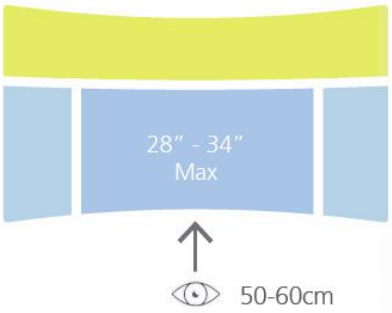


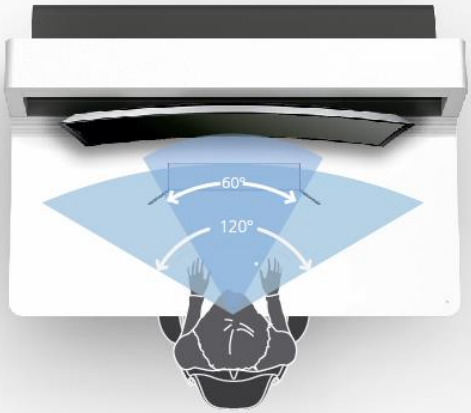
DISPLAY TECHNICAL SPECIFICATIONS

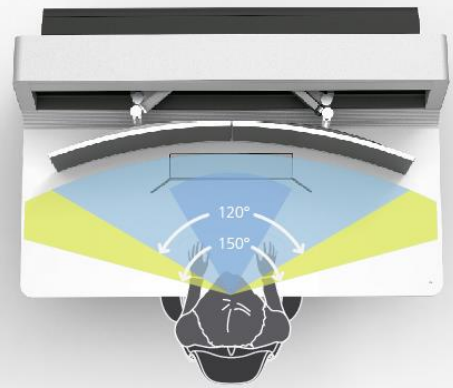
ACTEA SERIES + DeskWall, the ultimate control platform for the most demanding and advanced critical environments.

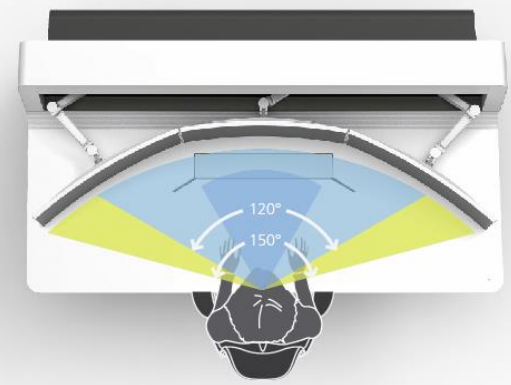
DeskWall creates and defines the IMMERSIVE CANVAS, it is the technology that best adapts to the human eye. Sit in the middle of the action and enjoy an immersive experience without distractions.

Recommended Immersive Canvas sizes for resolutions from 4K up to 65"

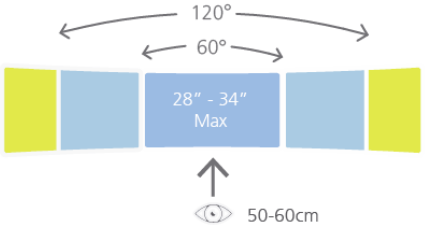




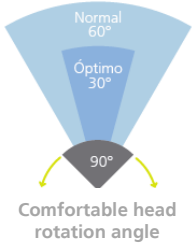




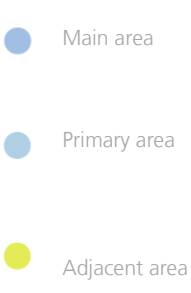
Maximum Immersive Multi-Canvas up to 3



Viewing angle



Comfortable head rotation angle



7. UX: USER EXPERIENCE

Both the health as the user experience are basic pillars in the design of the ACTEA series. Providing the necessary tools and aids to enhance and improve these aspects is essential to improve the performance of the people who use them. GESAB applies a concept of ergonomics and global health, not only focused on the operator, but on the entire ecosystem of users that can be involved in the use of the product in one way or another. From a human-centered design approach (HCD: Human Centered Design) GESAB enhances the user experience by taking care of all the details and interactions of people with the product and its environment.

The **Personal Dock** is a space for the operator's personal effects and its connectivity. Comfortable, flexible. Everything at hand, without ever leaving the control work. Its design also allows to channel the wiring of the work area to the interior of the compartment, unifying design, functionality and performance for the operator.

The exclusive concept of GESAB's Personal Dock is the result of the design and innovation studies carried out on the control rooms and the detailed analysis of the daily connectivity and functional needs of the operators. The Personal Dock offers the user all the necessary within reach so he can focus 100% on the functions of control without distractions or obstacles, and thanks to the integrated LED lighting system, the handling of the internal connections and accessories will always be easy even when the room is dimly lit. Different configurations of personal connections are available according to the needs of the operating position.

For the ACTEA ERGO+ series, a special version of the Personal Dock has been designed that includes the control of the movement control and of the safety system within the Personal Dock. Thus, the operator has the control knob to configure the different adaptation options of the ACTEA in an accessible and comfortable position. The location inside the Personal Dock protects the control knob from possible unintentional interactions that could affect the user of the console.

The **Personal Hub** is the perfect complement to the integration of accessories in a clean and accessible way for the operator. In addition to visually join the work plane with the front display, so that the entire workspace is

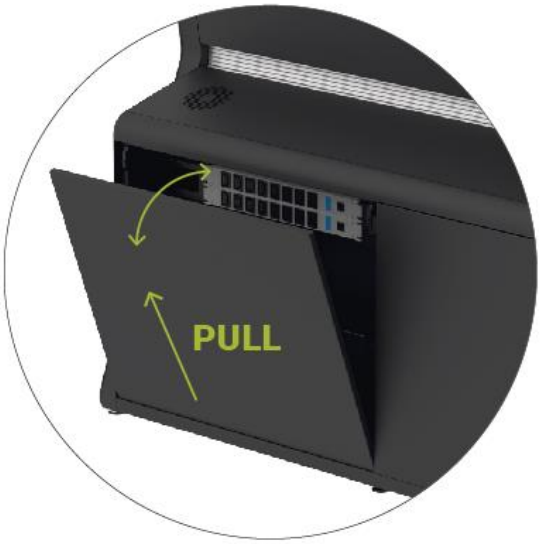
unified in a same visual language, the Personal Hub profile allows the integration of a multitude of accessories and complements. From integrated cable glands with direct access to the technical compartment, loudspeaker modules to fully configurable connection strips, the Personal Hub offers a minimalist, non-intrusive design in the workspace so the user can focus on critical tasks without discomfort. Both the selection of accessories as the location and distribution are fully configurable.

The design of the PERSONAL HUB allows to adapt the configuration of elements and position according to the project and needs of the operator. Due to the high customization ability of the workspace and display of the ACTEA series, the PERSONAL HUB module is the perfect tool to design a workspace adapted to the detail for each function and needs of the operative position.

The Personal Hub profile design is taken care of to the smallest detail to offer a clean and minimalist design to the workspace, but at the same time customizable, allowing to extend the functionalities of the product.

The management and maintenance of the equipment is vital to obtain the best possible performance, for that reason the ACTEA series was thought to the smallest detail to make these tasks something simple and comfortable for the user. The time of the maintenance and installation teams is one more resource of the companies and that is why they should be offered the best tools to develop their work in the most effective way.

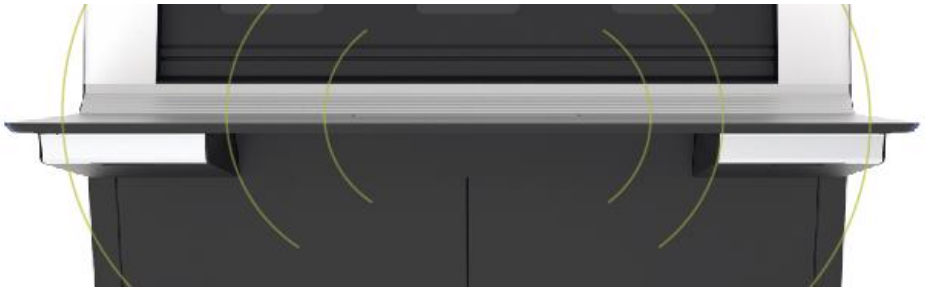
Thanks to the covers with push system and full access, the accessibility to the technical areas of ACTEA is a simple and comfortable task. All the technical compartment covers are part of a "push" type system that allows a clean external design and without visible handles and at the same time a simple cover extraction.



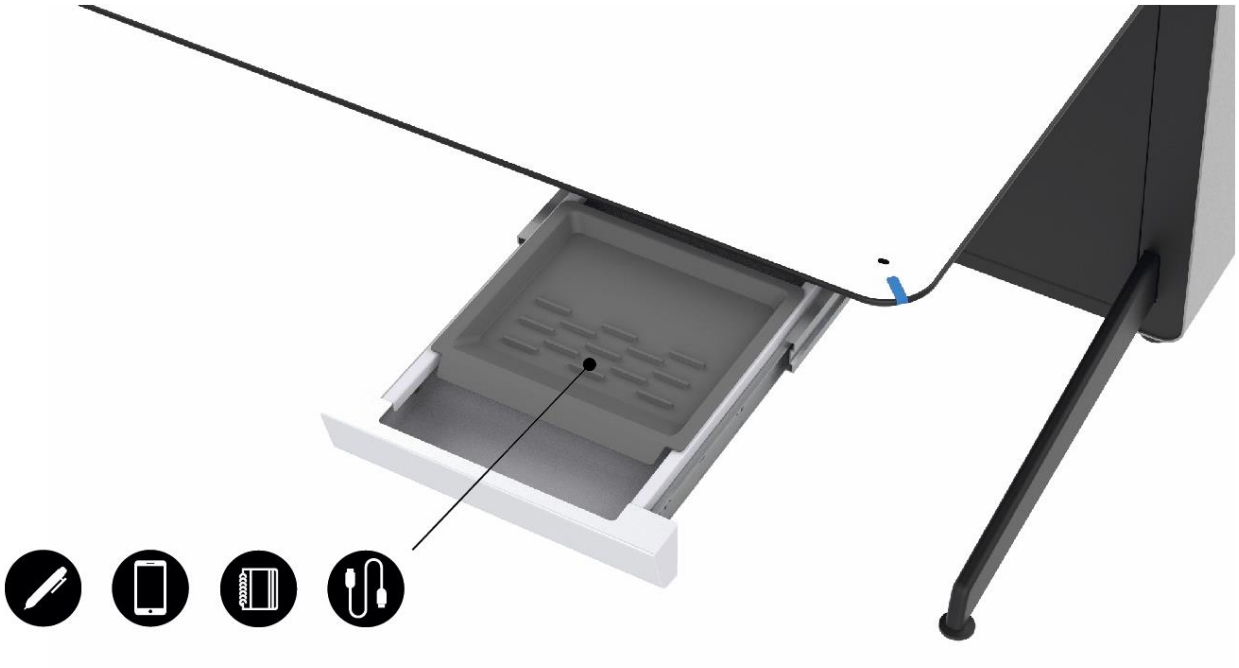
The removable covers allow a full access to the inner areas of the technical compartment, since all the space dedicated to the covers becomes an access surface once removed, thanks to the design without frames.

To further facilitate access to the upper column of the ACTEA MISSION model, a hold-down system with lock position for the rear upper column cover has been installed.
Thus, the ACTEA MISSION model can incorporate a large pivoting cover to favor the external image, reducing the number of joints between doors, but at the same time improving the access and the maintenance and installation of equipment and wiring tasks, thanks to the hold-down system.

Optionally, the operator's storage capacity can be expanded with the ACTEA FLYBOX accessory. At the ends of the consoles, the lower supports of the work surfaces are replaced by a FLYBOX module at each end, so that a hidden storage space is provided, without invading the operator's main work area and most importantly, without reducing legroom under the work surface as you would with a traditional buck



The Personal Box modules are a structural support with an integrated removable drawer, so that while maintaining the structural qualities of the support, the extra storage space function is added. It is an adequate space to store documentation and small personal accessories.
The removable drawer has full extension slides and automatic braking system to offer the best possible experience and finishes.



8. ADAPTABILITY AND CUSTOMIZATION

The adaptability and customization capabilities of the ACTEA series have been another of the main design focuses in the conceptualization phase of the product. The ability to adapt is fundamental in order to offer the best design adapted to the needs of each project. The good design lies in the details, and for that reason, the ability to adapt the solutions to the peculiarities of each project is basic to offer the best possible solution in each case and the best experience for the user.

The ACTEA series allows to create configurations that adapt to any geometry of the control rooms, either with continuous surface design between positions or with independent modules design.

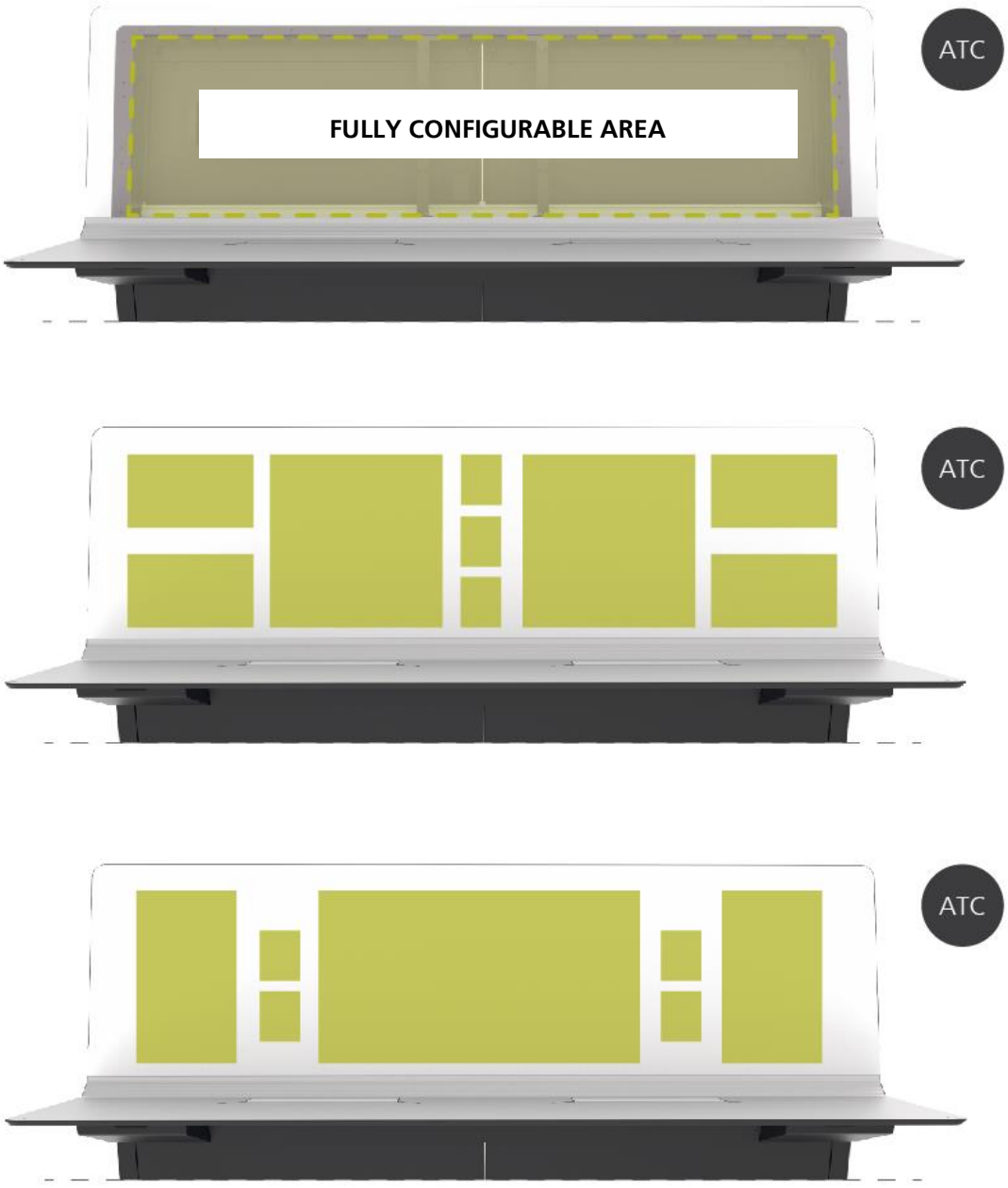
The ACTEA series allows to create curved configurations, both concave as convex of a wide range of diameters that allows the adaptation to any possible room configuration.

It is also possible to make continuous linear configurations without limitation of length or number of consecutive consoles. With the ACTEA series the limits are set by the space not by the product.

As standard, the ACTEA series has a work surface of the same length as the structure, offering the same space in the horizontal work plane as in the viewing plane. For solutions where more work space is required without increasing the size of the structure it is possible to expand the surface up to a total of 1200mm with respect to the structure, resulting in a cantilever up to 600mm at each end using an additional lower support. Without the support, it can be extended up to a maximum of 300mm.

The front area of the display areas is another of the components with greater customization ability.

The whole area inside the upper column can be configured according to the needs of the project's equipment and the ergonomics of the operator looking for the highest possible performance between the system and the people. The design of the ACTEA series and especially of the ATC model allows a complete integration of the different display equipment in the console to offer a clean design and without distractions for the operator, improving the ergonomics and the experience of use of the set.



Due to the evident superior capacity of the upper column, the ACTEA ATC model is the product that offers more possibilities and capacity when it comes to integrating equipment in the display front.

The other models of the ACTEA series allow a similar level of configuration options with a height limited by the measurements of the upper column of the MISSION and TOWER models.

The MISSION model of the ACTEA series integrates the new WiRail as standard. It offers an additional regulation system to the ergonomic arms, already with much margin of adaptation. The WiRail system naturally covers most of the front of the MISSON console, to offer the widest range of possible longitudinal regulation. In a special way, it is possible to reduce the length of the system in order to integrate additional equipment in the front.

For a totally free configuration of the front, the TOWER model is available. It offers all the space available in the upper column to adapt the equipment in the operator display area.

9. FINISHES AND MATERIALS

Each material, each shape has its place. Carefully designed with precision, created to surprise the most demanding users. The high-quality materials complete the sensory experience offered by ACTEA. Lines created to perfectly combine aesthetics and functionality, ensuring the maximum durability of a future-proof design.

The ACTEA series has a wide range of finishes to adapt perfectly to the style and design of each environment and project, always maintaining the high standards of quality, both in materials as in the defining design of GESAB. Thanks to the combination of colors and finishes of the different materials that make up ACTEA, it is possible to create infinite combinations with different finishing levels.

METALLIC SURFACES

As standard, metal surfaces have a high-quality epoxy paint finish with high abrasion, scratches and chemical components resistance to ensure the highest possible durability and resistance. Although a basic range of colors is offered as standard, custom designs can be made according to the project's requirements

TOP-QUALITY FINISHES.

With the aim of offering a superior finish, both in design as in material quality, it is possible to replace the paint finish with anodized aluminum pieces in a package of pieces strategically designed to offer an elegant, minimalist and great quality image and design.

PHENOLIC COMPACT ON THE WORKING SURFACES

The material applied to the work surfaces is MaxCompact phenolic compact by Fundermax, for its excellent structural properties, high resistance to wear and the freedom of design that it enables, it can be adapted to any shape no matter how complex.

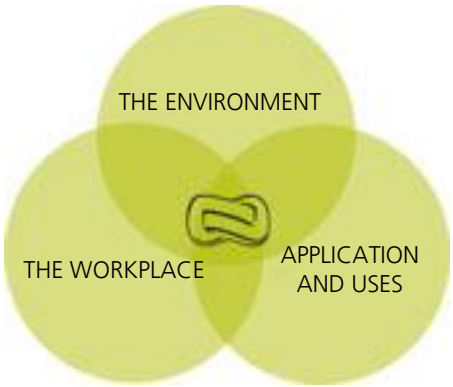
The standard color of the product is the matte low-reflection white finish. On the one hand, the white color provides a suitable reflection index to optimize the natural or artificial light of the room, because the white color has the highest light reflection index, between 65-85% depending on the surface.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

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

10.GESAB HEALTH

One of the challenges of GESAB is the continuous improvement in the processes, products and services. All the departments are involved in this corporate commitment and work together in the strictest compliance with national and international regulations, as well as in the analysis and study of the various reports of recommendations that we implement in all our products, solutions and services.

+ Health

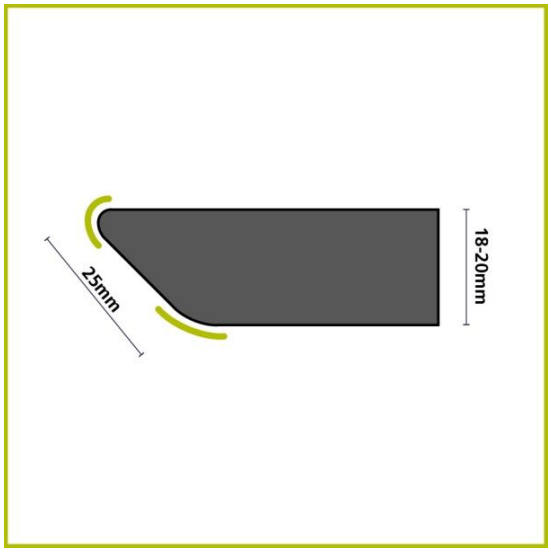


Health in the workplace, and especially in the 24/7 operator positions is one of the priorities of our company. The studies and recommendations made on this point distinguish three major groups to take into account: The environment, the workplace and its use and application.

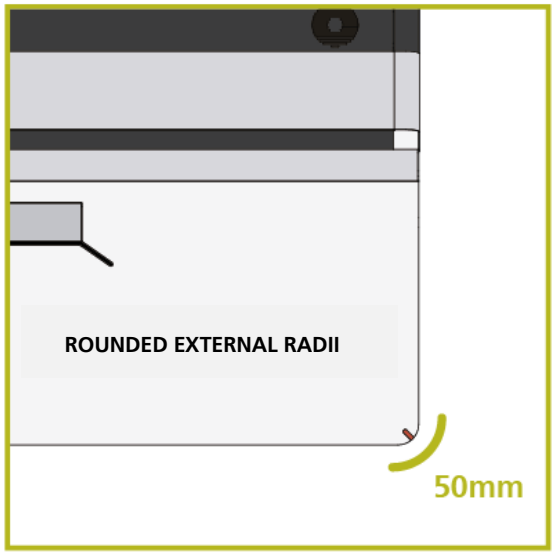
To eliminate these risks, GESAB consoles are designed taking into account the recommendations of different studies that we detail in each of the sections.

To avoid micro-trauma, the work surfaces are made of 18mm phenolic material, beveled and rounded at all contact points, eliminating any kind of edge or aggressive angle.

SURFACES BEVELED SECTION

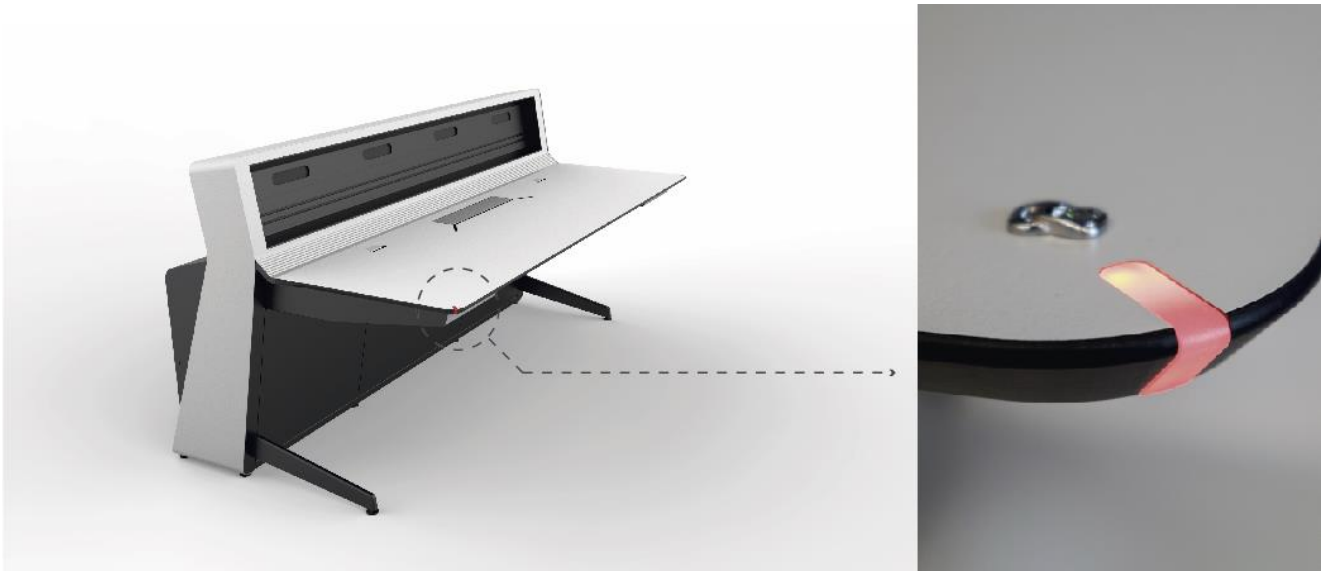


EXTERNAL SURFACE PLAN VIEW

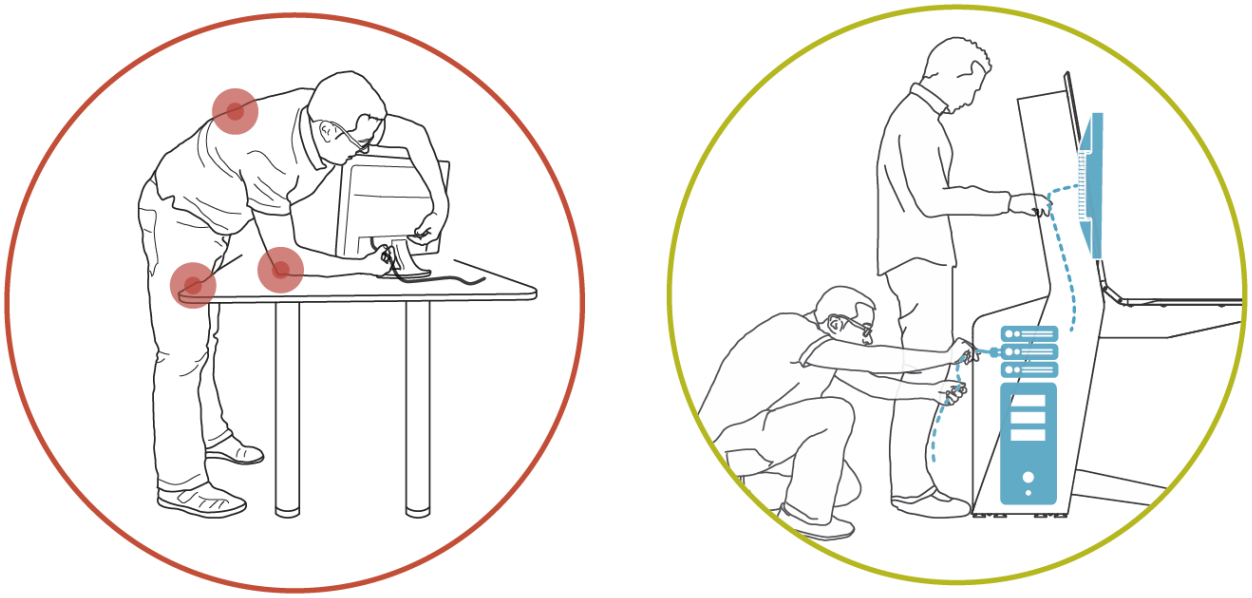


In addition to the ergonomic finish of the work surfaces, all GESAB consoles are equipped with PRL LED indicators that indicate, at each corner, the possible risk and contact points. In addition, they are fully configurable in order

to adapt the color to different types of information and alerts. The new integrated RGB LED system allows color settings without the need for programming or additional accessories.



The concept of global ergonomics applied to all our products and solutions allows to avoid risk positions and actions on the part of any user, from assembly personnel to the maintenance technicians. Parallel to a careful design to promote good practices and avoid bad positions and generally facilitate the accessibility and usability of the product, the best way to avoid injuries is to provide all information and training regarding this.



All console surfaces are finished along the perimeter, beveled and rounded to prevent knocking or micro-trauma to any console's user or activity: operator, technician, maintenance and cleaning.

In addition, and as an improvement for users, GESAB has published the "Relax GESAB" exercise guide for operators in 24/7 critical environments, whose follow-up is recommended to avoid injuries and improve health.

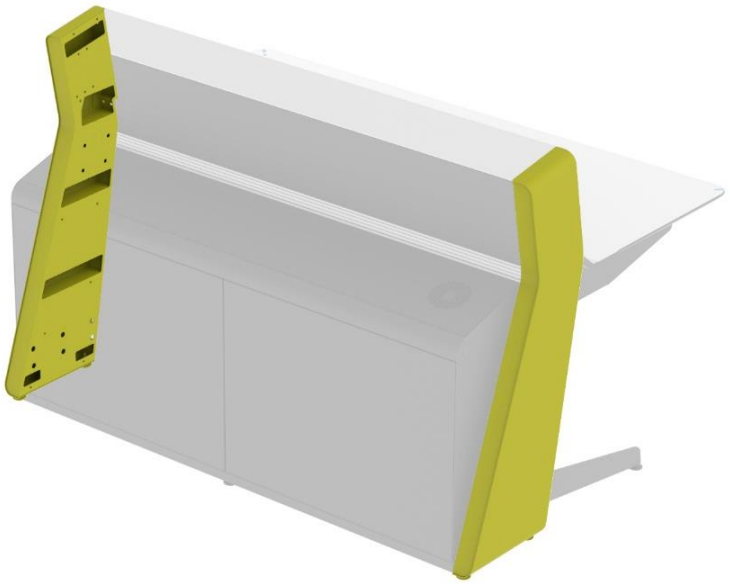
* Request the complete GESAB Care guide at: info@gesab.com

2. ACTEA series technical specifications

SIDES

The sides are the main element of the chassis and create the vertical support necessary for the joint of the rest of the UNLIMITED FRAME components. In order to provide the necessary vertical stability and reinforcement, they are made of a single welded piece of **2mm thick sheet steel**, cold rolled according to UNE EN 10130:1999 and quality certificate UNE EN 10024:2006, painted with high-quality micro-textured epoxy powder paint according to standards UNE 48-098-90; UNE 48-031-80; UNE 48-026-80; UNE 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, made in laboratories accredited by ENAC.

External covers in 3mm quality certificate 6060S (alloy) Aluminum sheet according to UNE-EN 573-3 (chemical

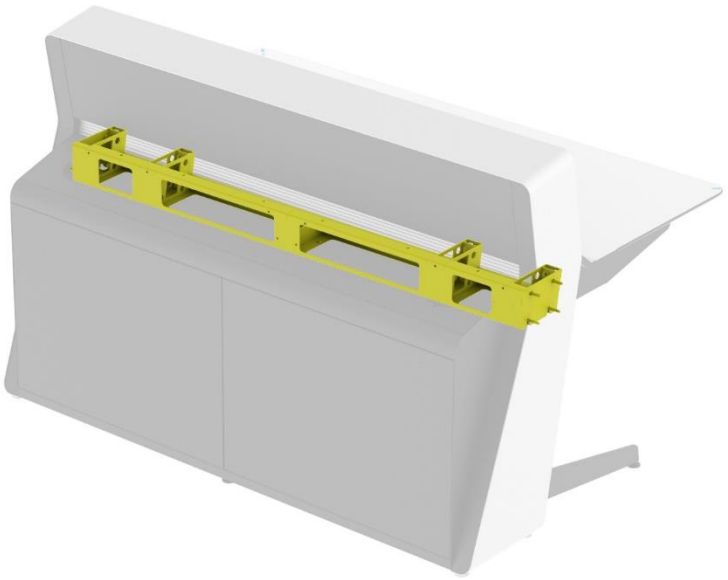


composition) and UNE-EN 755-2 (mechanical properties). With T-5 heat treatment. Anodized silver finish according to ISO 7599:2010, between 5-15µm microns according to ISO 2360:2003 and coating sealing 0 according to standard ISO 2143:2010.

All ACTEA sides incorporate 2 GESAB design levelers with high load capacity and easy leveling system without disassembly.

CENTRAL BEAM

The central beam transversely frames the UNLIMITED FRAME chassis and creates a communication channel and longitudinal wiring organization inside the console. The open profile design allows good communication between the different internal spaces of the console, while maintaining excellent structural properties to stabilize the chassis in a longitudinal way. In its front area, it integrates a reinforced joint system to attach the support brackets of the work surface. Single welded set to ensure stability and necessary reinforcement to the console and all attached



components. **2mm and 4mm thick combined sheet steel**, cold rolled according to UNE EN 10130:1999 and quality certificate UNE EN 10024:2006, painted with high-quality micro-textured epoxy powder paint according to standards UNE 48-098-90; UNE 48-031-80; UNE 48-026-80; UNE 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, made in laboratories accredited by ENAC.

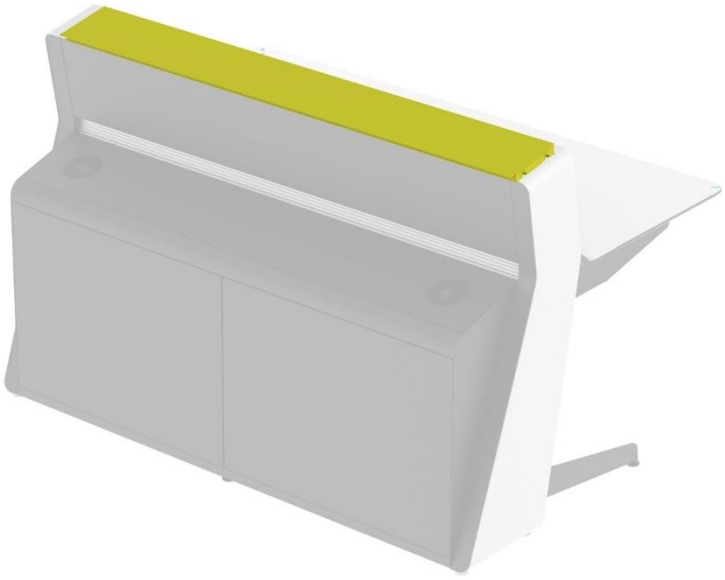
LOWER STRUCTURAL TRAY

The lower tray provides a structural base to the chassis and reinforces stability through the union to the sides. Depending on the models and dimensions, it is possible to connect the intermediate sections and the side covers of the compartment. The tray allows the passage of wiring from the technical floor through the cable glands integrated in the different sections, both at the ends as in the front and rear of the compartment. In order to provide the necessary stability and reinforcement, the trays are made of a single welded piece of **2mm thick sheet steel**, cold rolled according to UNE EN 10130:1999 and quality certificate UNE EN 10024:2006, painted with high-quality micro-textured epoxy powder paint according to standards UNE 48-098-90; UNE 48-031-80; UNE 48-026-80; UNE 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, made in laboratories accredited by ENAC.

All lower structural trays include GESAB design levelers with high load capacity and easy leveling system without disassembly.

UPPER STRUCTURAL TRAY

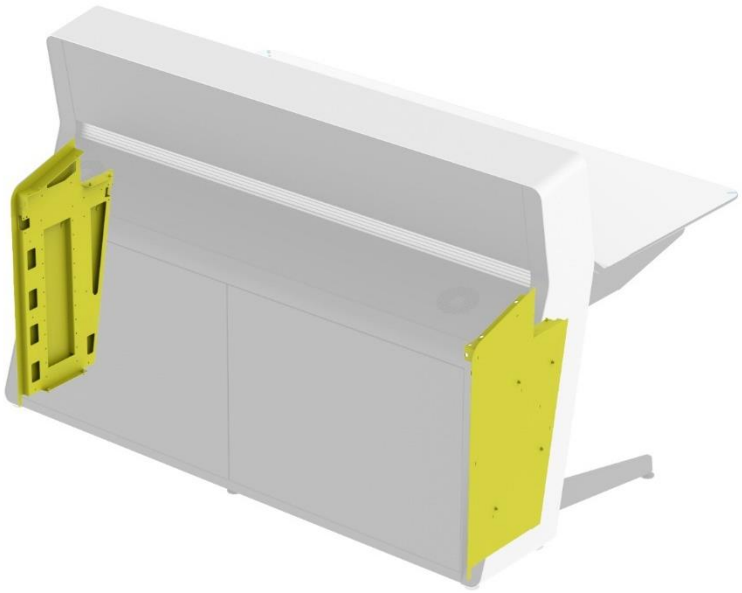
The upper tray reinforces the top stability of the chassis through the union to the sides. Depending on the models and dimensions allows the joint of the intermediate sections. In order to provide the necessary stability and reinforcement, the trays are made of a single welded piece of **2mm thick sheet steel**, cold rolled according to UNE EN 10130:1999 and quality certificate UNE EN 10024:2006, painted with high-quality micro-textured epoxy powder paint according to standards UNE 48-098-90; UNE 48-031-80; UNE 48-026-80; UNE 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, made in laboratories accredited by ENAC.



External covers in 3mm quality certificate 6060S (alloy) Aluminum sheet according to UNE-EN 573-3 (chemical composition) and UNE-EN 755-2 (mechanical properties). With T-5 heat treatment. Anodized silver finish according to ISO 7599:2010, between 5-15µm microns according to ISO 2360:2003 and coating sealing 0 according to standard ISO 2143:2010.

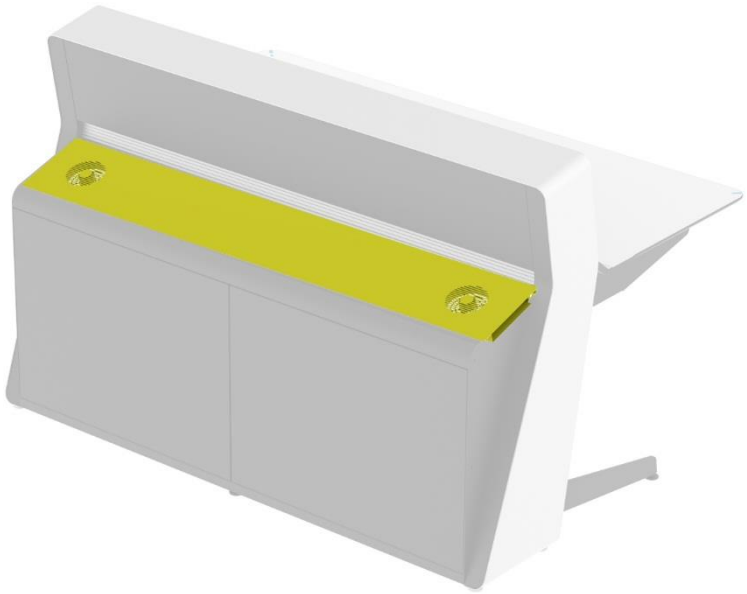
COMPARTMENT SIDES (300/500)

The sides of the compartment (300mm/500mm) serve to protect the ends of the console, as well as a support element for the different internal accessories, such as 19" sections, removable trays, conduits, etc. They are made of a single welded piece of **2mm thick sheet steel**, cold rolled according to UNE EN 10130:1999 and quality certificate UNE EN 10024:2006, painted with high-quality micro-textured epoxy powder paint according to standards UNE 48-098-90; UNE 48-031-80; UNE 48-026-80; UNE 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, made in laboratories accredited by ENAC.



TOP VENTILATION COVER

The top ventilation cover provides protection to the upper part of the compartment and also integrates the forced ventilation AIRFLOW SYSTEM of the ACTEA series. The cover allows comfortable access to the ventilation system to make the installation and maintenance of the system easier. It is made of a single welded piece of **1.5mm thick sheet steel**, cold rolled according to UNE EN 10130:1999 and quality certificate UNE EN 10024:2006, painted with high-quality micro-textured epoxy powder paint according to standards UNE 48-098-90; UNE 48-031-80; UNE 48-026-80; UNE 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, made in laboratories accredited by ENAC.



The AIRFLOW SYSTEM of the ACTEA series includes 2 ultra-silent 120mm diameter fans and a total ventilation capacity of 171.5 m3/h. Technical specifications of the fan:

- Virtually inaudible operation 16.4dB(A) max.
- 6-pole, 3-phase motor for low consumption and less vibration
- Advanced dynamic fluid bearings that guarantee a life of up to 300,000h
- 7-blade propeller with surface optimized for excellent airflow.
- Removable anti-vibration mounts to minimize transmission of vibrations to the structure.
- Advanced IC motor control to reduce electrical noise.

An adjustable courtesy light that illuminates the column joint profile can also be optionally included.

The LED-type luminaire incorporates a PA diffuser that generates a gradual illumination. The profile of the luminaire pivots, so that the angle of incidence of the light can be adjusted on the joint profile, being able to adapt it to the light of each space.

COLUMN JOINT PROFILE

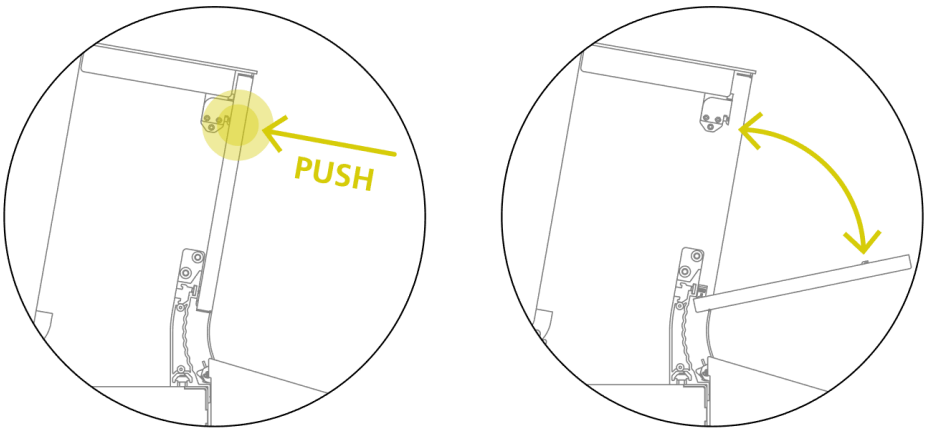
Aluminum profile forming the joint between the compartment and the upper column, as well as housing for the upper door system. The optimized profile design allows the incorporation of both the pivoting door system with movement retention as the standard door system.

Extruded profile of 2.5mm thick general aluminum. Quality certificate 6060S (alloy) according to standard UNE-EN 573-3 (chemical composition) and UNE-EN 755-2 (Mechanical properties). With T-5 heat treatment. Anodized silver finish according to ISO 7599:2010, between 5-15µm microns according to ISO 2360:2003 and coating sealing 0 according to standard ISO 2143:2010.

COLUMN PIVOT DOOR

Pivot door with easy-to-open push system with no visible handles and constant movement retention mechanism. The easy-to-open push system offers a comfortable solution and at the same time a great value in design thanks to the fact that no visible handles are necessary for its opening. Simultaneously, the opening mechanism integrates hinges with movement retention in order to position the door at any point without effort, providing greater safety in the assembly and maintenance of equipment.

The doors are made of a single welded piece of **1.2mm thick sheet steel**, cold rolled according to UNE EN 10130:1999 and quality certificate UNE EN 10024:2006, painted with high-quality micro-textured epoxy powder paint according to standards UNE 48-098-90; UNE 48-031-80; UNE 48-026-80; UNE 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, made in laboratories accredited by ENAC.



Hold-down system and opening adjustment of the doors by means of low-profile **friction hinges**, integrated in the profile. Properties of the Southco ST Series hinges: Made of Zinc and Steel, minimum duty cycle 20,000 cycles, maximum static load 1000 N.

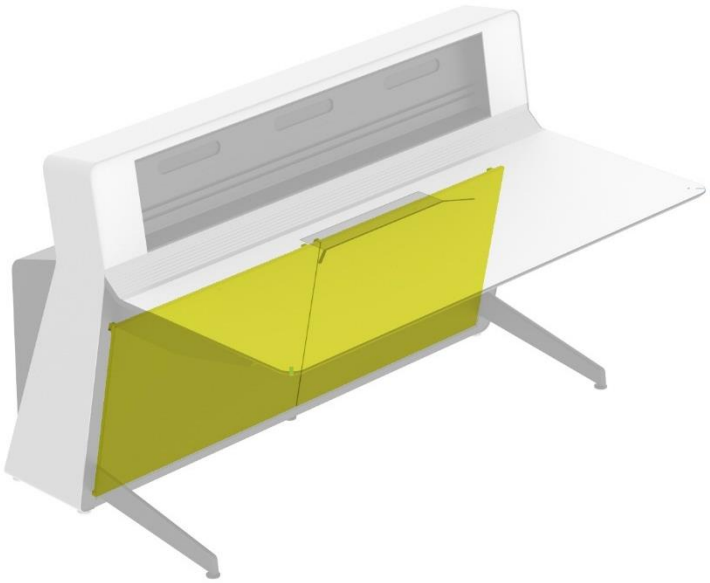
COMPARTMENT REAR DOORS

Set of modular doors that protect the rear area of the compartment and allow quick and convenient access to the internal technical area of the compartment. The doors integrate a push opening system for an integrated and minimalist design without visible handles. Units and measurements according to configuration.

The doors are made of a single welded piece of **1.2mm thick sheet steel**, cold rolled according to UNE EN 10130:1999 and quality certificate UNE EN 10024:2006, painted with high-quality micro-textured epoxy powder paint according to standards UNE 48-098-90; UNE 48-031-80; UNE 48-026-80; UNE 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, made in laboratories accredited by ENAC.

COMPARTMENT FRONT DOORS

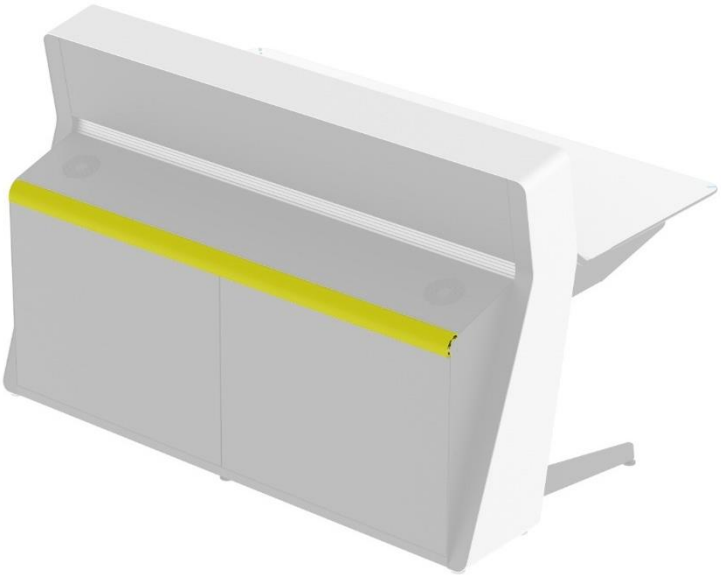
Set of modular doors that protect the front area of the compartment and allow quick and convenient access to the internal technical area of the compartment. In addition to the rear access area, the ACTEA series allows access from the operator's area to spaces where access from the rear is not possible.



The doors are made of a single welded piece of **1.2mm thick sheet steel**, cold rolled according to UNE EN 10130:1999 and quality certificate UNE EN 10024:2006, painted with high-quality micro-textured epoxy powder paint according to standards UNE 48-098-90; UNE 48-031-80; UNE 48-026-80; UNE 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, made in laboratories accredited by ENAC.

COMPARTMENT CURVED PROFILE

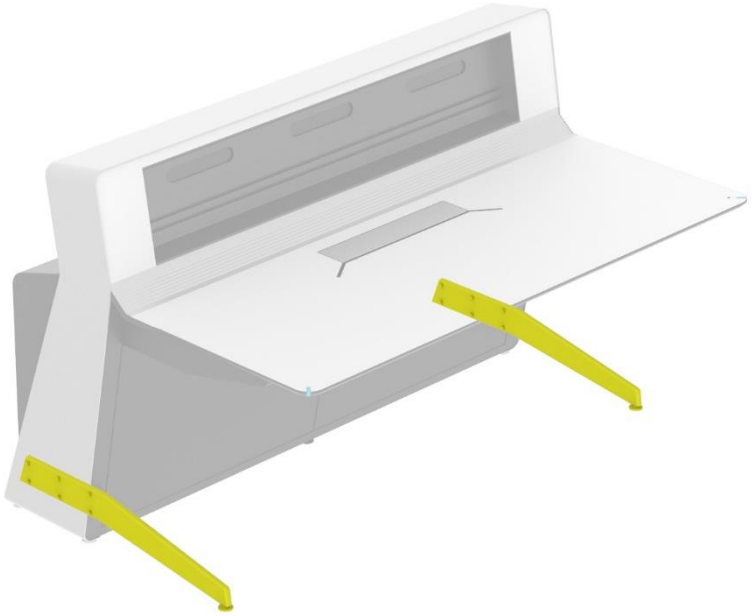
Curved design profile that serves as a joint and transverse reinforcement to the rear of the compartment. The profile provides an excellent finish in the joint of the different compartment covers, always guaranteeing the maximum quality of finishes in all the models and configurations.



Extruded profile of 2.5mm thick general aluminum. Quality certificate 6060S (alloy) according to standard UNE-EN 573-3 (chemical composition) and UNE-EN 755-2 (Mechanical properties). With T-5 heat treatment. Anodized silver finish according to ISO 7599:2010, between 5-15µm microns according to ISO 2360:2003 and coating sealing 0 according to standard ISO 2143:2010.

STABILIZER FEET

Feet that provide stability and reinforcement to the console. The feet are designed so that they are integrated in the side. Each stabilizer foot includes 1 GESAB design **leveler** with high load capacity and easy leveling system without disassembly.



With a minimalist and barely obstructive design, both visually as physically, the stabilizer feet are made of **20mm thick sheet steel**, cold rolled according to UNE EN 10130:1999 and quality certificate UNE EN 10024:2006, and black epoxy paint surface finish, painted with high-quality micro-textured epoxy powder paint according to standards UNE 48-098-90; UNE 48-031-80; UNE 48-026-80; UNE 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, made in laboratories accredited by ENAC.

WORK SURFACE

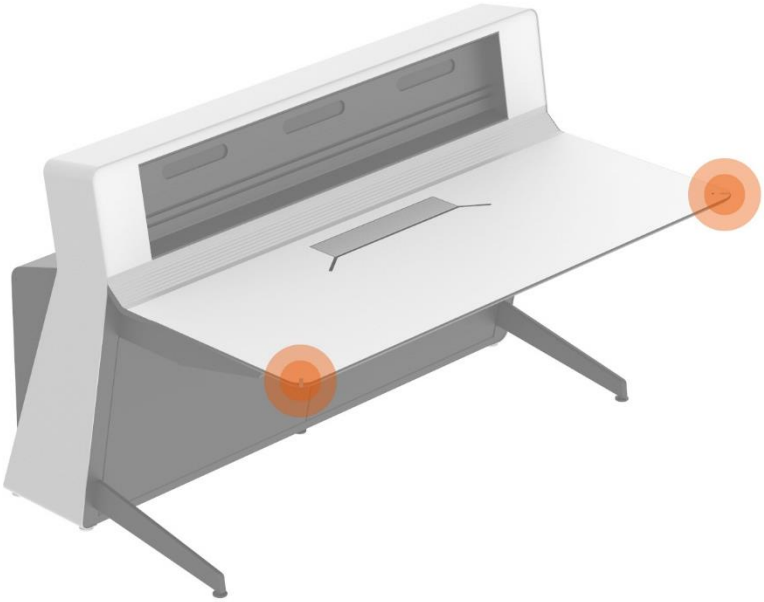
The work surface is the main area of contact of the operator with the console and for that reason to offer the best experience of possible use, ergonomics, operator reaches, materials and finishes aspects are of vital importance. The work surface integrates a pivoting cover that uncovers the Personal Dock personal connection area that provides the operator with a personal connection space for accessories.

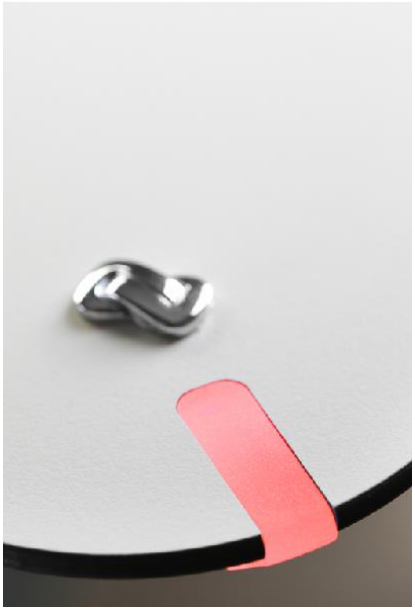
High quality work surfaces for table in 18mm thick phenolic compact, white with black core and FH surface. High pressure laminate (HPL) manufactured according to standard EN 438; Composed of cellulose and impregnated with thermosetting resins and pressed at high pressure and temperature. Its inner core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

At the ends of the work surface, the GESAB PRL safety system is integrated.

PRL GESAB SAFETY SYSTEM

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





The technical features of the RGB LED are detailed below:

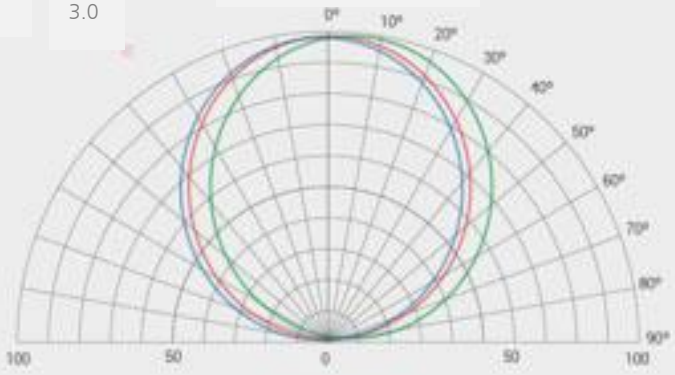
Technical Information

Color emission
Dominant wavelength [nm]:
Light intensity [mcd]
Voltage [V]

Standard, predefined and custom color options

Blue	Green	Red
470	527	624
400	1200	700
2.1	3.3	3.0

RGB lighting diagram



PERSONAL DOCK

The exclusive **Personal Dock** is a space for the operator's personal effects and its connectivity. Comfortable, flexible. Everything at hand, without ever leaving the control work. Its design also allows to pipe the wiring of the work area towards 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. Extruded profile cover of 2.5mm thick general aluminum. Quality certificate 6060S (alloy) according to standard UNE-EN 573-3 (chemical composition) and UNE-EN 755-2 (Mechanical properties). With T-5 heat treatment. Anodized silver finish according to ISO 7599:2010, between 5-15µm microns according to ISO 2360:2003 and coating sealing 0 according to standard ISO 2143:2010.

The Facility Custom system, thanks to the expandable plug-in terminal strips and the Facility Custom Module for custom element mounting, allows multiple ways to create flexible connections. With its practical units, it provides a safe interconnection with networks at the table and thanks to the elegant retractable supply systems it favors a communication without difficulties for the operator and a long-term guarantee thanks to the extension and substitution ability. The modification of the equipment offers the possibility to be updated at any time according to the most current state of the art.

With only a few additional components, completely new possibilities are opened in the electrical installation. The wide range of Custom Module offers you the possibility to easily integrate audio, video and networks. Thanks to the 50 x 50 mm and 55 x 55 mm adapter racks available as standard, the Custom Module optimally completes all the usual switching programs of renowned manufacturers.

ACTEA PERSONAL HUB

Joining profile between the work surface and the upper column. The Personal Hub design in addition to providing continuity between the surfaces, creating a cleaner and more visually continuous workspace for the operator, allows to add different accessories such as connection areas (power/voice/data), extra cable glands, built-in speakers, etc. in a fully integrated way in the profile

Extruded profile of 2.5mm thick general aluminum. Quality certificate 6060S (alloy) according to standard UNE-EN 573-3 (chemical composition) and UNE-EN 755-2 (Mechanical properties). With T-5 heat treatment. Anodized silver finish according to ISO 7599:2010, between 5-15µm microns according to ISO 2360:2003 and coating sealing 0 according to standard ISO 2143:2010.

ACTEA ACCESSRAIL MISSION

GESAB's exclusive system for ACTEA MISSION that integrates in the upper column a sliding rail for ergonomic arms, increasing in 1 dimension the regulation ability of the monitors in a comfortable and easy way from the front area of the console. The main element of the system is a set of 2 profiles of GESAB design that once united allow the coupling and longitudinal adjustment of the different ergonomic arms. In addition, the system itself includes a cable gland area towards the interior of the chassis so that the wiring remains always tidy or hidden. The WIRAIL MISSION system also provides extra space for the in-depth regulation of the arms, since the assembly is integrated in the upper column itself, so that the ergonomic arms can be collected in this inner space of the console's column.

Extruded profile of 2.5mm thick general aluminum. Quality certificate 6060S (alloy) according to standard UNE-EN 573-3 (chemical composition) and UNE-EN 755-2 (Mechanical properties). With T-5 heat treatment. Anodized silver finish according to ISO 7599:2010, between 5-15µm microns according to ISO 2360:2003 and coating sealing 0 according to standard ISO 2143:2010.

FRONT BRACKET

The front support brackets support the work surface and provide the necessary stability to the phenolic compact cover. The brackets are located at the ends, so that the intermediate space is reserved for the Personal Dock, cable gland and location of other possible accessories in the central free zone. In configurations with a length greater than 2m, it will be necessary to add an intermediate structural reinforcement. The front brackets are made of a single welded piece of **2mm thick sheet steel**, cold rolled according to UNE EN 10130:1999 and quality certificate UNE EN 10024:2006, painted with high-quality micro-textured epoxy powder paint according to standards UNE 48-098-90; UNE 48-031-80; UNE 48-026-80; UNE 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, made in laboratories accredited by ENAC.

PERSONAL BOX SUPPORT

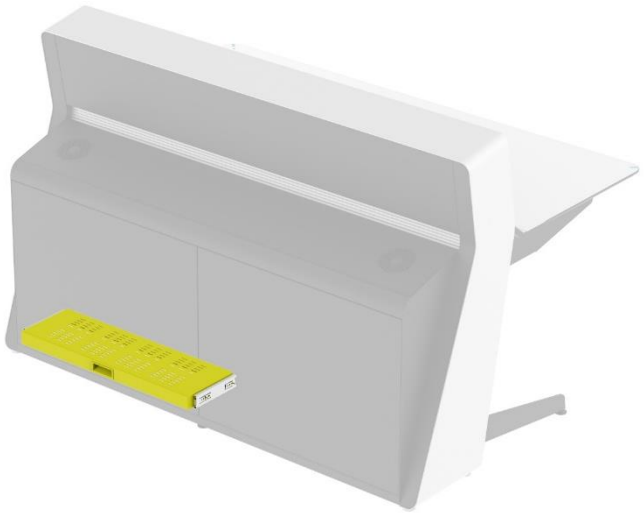
The PERSONAL BOX support apart from providing structural support to the work surface as the front frame does, integrates a system of removable drawers by means of slides with a cushioned closing system. The PERSONAL BOX supports are placed on the sides of the operator, within an easy and comfortable access radius, without obstructing the main tasks of the control space. The inner space of the PERSONAL BOX is sufficient to accommodate small accessories and documentation (W44xD398xH243mm).

The PERSONAL BOX supports are made of **2mm thick sheet steel and 1.2mm** for the removable drawers, cold rolled according to UNE EN 10130:1999 and quality certificate UNE EN 10024:2006, painted with high-quality micro-textured epoxy powder paint according to standards UNE 48-098-90; UNE 48-031-80; UNE 48-026-80; UNE 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, made in laboratories accredited by ENAC.

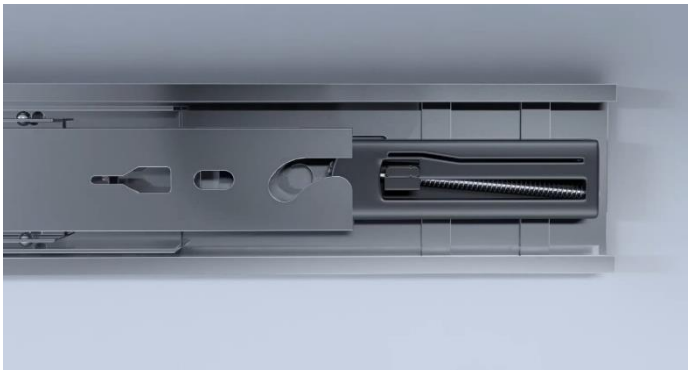
The removable drawers' system on the PERSONAL BOX support has a set of **soft close** telescopic slides. Main technical features of the slides; Load capacity up to 45kg. Extension of 100%. Locking device in closed position.

REMOVABLE TRAYS

Removable trays by extension slides. The removable trays provide easier and more convenient access to the equipment installed inside the compartment. Through a system of telescopic slides with extension of 100% and automatic closing. The removable trays can be installed in any position of the 19" sections of the ACTEA series compartment, either with front or rear extraction according to the user's needs. The removable trays are made of **1.5mm thick sheet steel**, cold rolled according to UNE EN 10130:1999 and quality certificate UNE EN 10024:2006, painted with high-quality micro-textured epoxy powder paint according to standards UNE 48-098-90; UNE 48-031-80; UNE 48-026-80; UNE 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, made in laboratories accredited by ENAC.

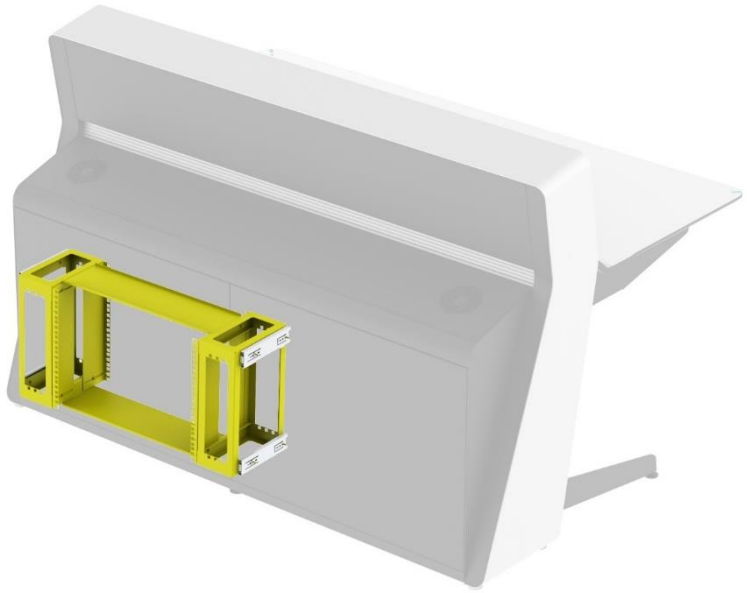


The compartment's removable tray system has a set of telescopic self-closing slides. Main technical features of the slides; Load capacity up to 45kg. Extension of 100%. Opening/closing force of 14-27N per slide.



19" REMOVABLE MODULES

The 19" removable modules have a capacity of up to 8 units in height and allow the extraction of the rack equipment in a way that facilitates the installation of equipment and its maintenance. The 19" removable modules have a 4 telescopic slides system with extension of 100% and automatic closing. In the longitudinal free space between the 19" sections, other equipment or accessories can be installed vertically optimizing the inner space of the compartment.

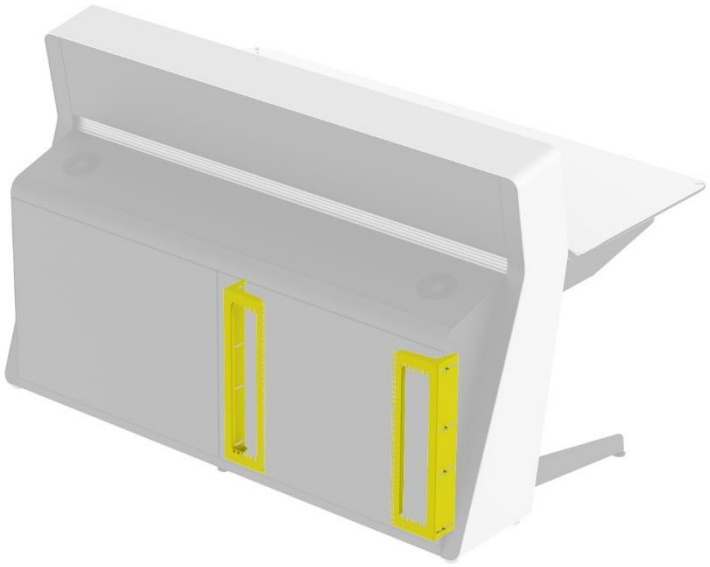


The 19" removable modules are made of **1.5mm thick sheet steel**, cold rolled according to UNE EN 10130:1999 and quality certificate UNE EN 10024:2006, painted with high-quality micro-textured epoxy powder paint according to standards UNE 48-098-90; UNE 48-031-80; UNE 48-026-80; UNE 48-024-80; UNE 48-032-80; UNE 48-183-84 and UNE 48-169-92 and subjected to demanding aesthetic finish durability tests according to ISO 7253 and DIN 50021, made in laboratories accredited by ENAC.

The compartment's 19" removable module system has a set of telescopic self-closing slides. Main technical features of the slides; Load capacity up to 45kg. Extension of 100%. Opening/closing force of 14-27N per slide.

19" MODULES

The lower compartments of the ACTEA series are divided into 600 to 800mm modular spaces. These spaces can include 19" modules with a maximum height of up to 12 units, which can be oriented both towards the rear as the front.



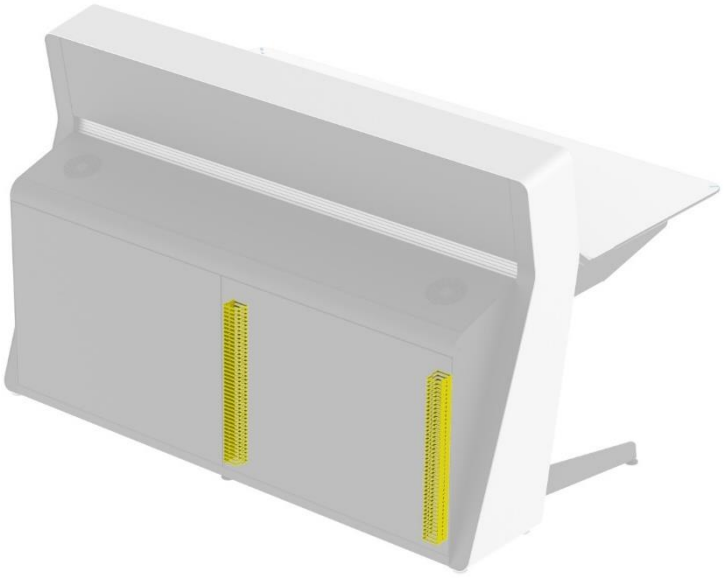
Depending on the measurements of the internal sections of the compartment, the 19" modules can incorporate an additional space of up to 3 units horizontally. This space can be used to install additional equipment or terminal strips. The 19" modules are available in 2U-12U high.

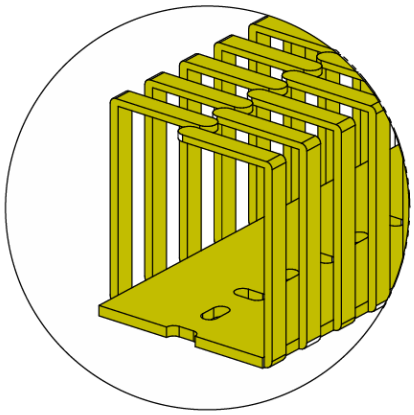
The 19" modules are made of **1.5mm thick sheet steel**, cold rolled according to UNE EN 10130:1999 and quality certificate UNE EN 10024:2006, painted with high-quality micro-textured epoxy powder paint according to standards UNE 48-098-90; UNE 48-031-80; UNE 48-026-80; UNE 48-024-80; UNE 48-032-80; UNE 48-183-84 and UNE 48-169-92 and subjected to demanding aesthetic finish durability tests according to ISO 7253 and DIN 50021, made in laboratories accredited by ENAC.

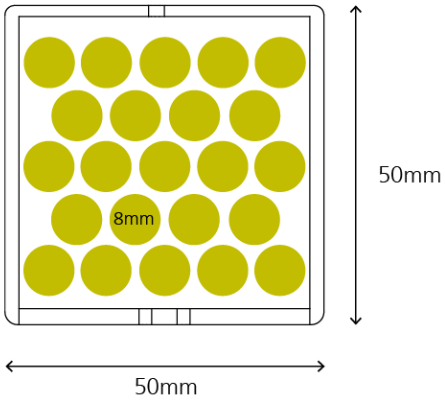
WIRING PIPPING

In each internal section of the ACTEA series compartments, 2 conduits for wiring are included. These components help to organize and channel the wiring vertically into the compartments. The pipping can be installed either on the front or rear of the console depending on the selected internal configuration.

Panduct™ piping FL-type flexible duct, 50.0mm wide x 50.0mm high, 19.7' (6.00m) long, flexible polypropylene, adhesive, light gray.







PACKAGING AND TRACEABILITY

To guarantee the traceability of our product and to provide 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. Thus, 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 and its marking allow us to know the history, location and trajectory of our products along the manufacture, supply and installation chain at any time.

The product packaging ensures the integrity of the product, both in the structural part as in the properties of the materials (by oxidation or other degradation caused by the environmental conditions of the shipment).

Each part or subassembly is individually protected and packed for its collection inside the processed box for its packaging and transport to destination.

The packaging complies with the international SOLAS-IMO standard, regarding safety points for its lashing.

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

The exterior of the packaging is always duly identified, with the name of the company and the different boxes that compose the shipment total, together with the destination address. The boxes must be marked with the relevant signaling marking.

For marine shipments, the product is safeguarded by thermo-sealed VCI sheaths.

3.Reference standards

All products designed by **GESAB** comply with the current regulations on ergonomics, the related UNE regulations and the standards published by entities of recognized prestige regarding the design of positions with data display screens and control centers.

- UNE-EN 527-2011
- STANDARD UNE-EN ISO 11064, on Ergonomic Design of Control Centers.
- NTP 602: Ergonomic design of the workstation with display screens.
- Law 31/1995 of November 8, on the Prevention of Occupational Hazards.
- Royal Decree 486/1997 of April 16, which establishes the minimum health and safety provisions in the workplace.
- Royal Decree 488/1997, of April 14, on the minimum health and safety requirements for working with equipment including display screens, together with the manual of technical standards for the ergonomic design of positions with data display screen prepared by the INSHT.
- Royal Decree 1801/2003, of December 26, on the product's general safety.

Quality certifications and approvals

ISO 9001 CERTIFICATION QUALITY

ISO 14001 CERTIFICATION ENVIRONMENT

OHSAS 18001 CERTIFICATION OCCUPATIONAL HAZARD PREVENTION

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

COMPANY ENROLLED IN THE PROGRAM OF VOLUNTARY AGREEMENTS ON CO2 REDUCTION.

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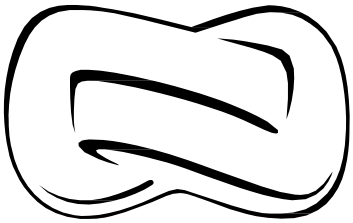

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