

CATALOG

# Control Room Solutions

## Portfolio Overview





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**Control room operators make  
hundreds of decisions**

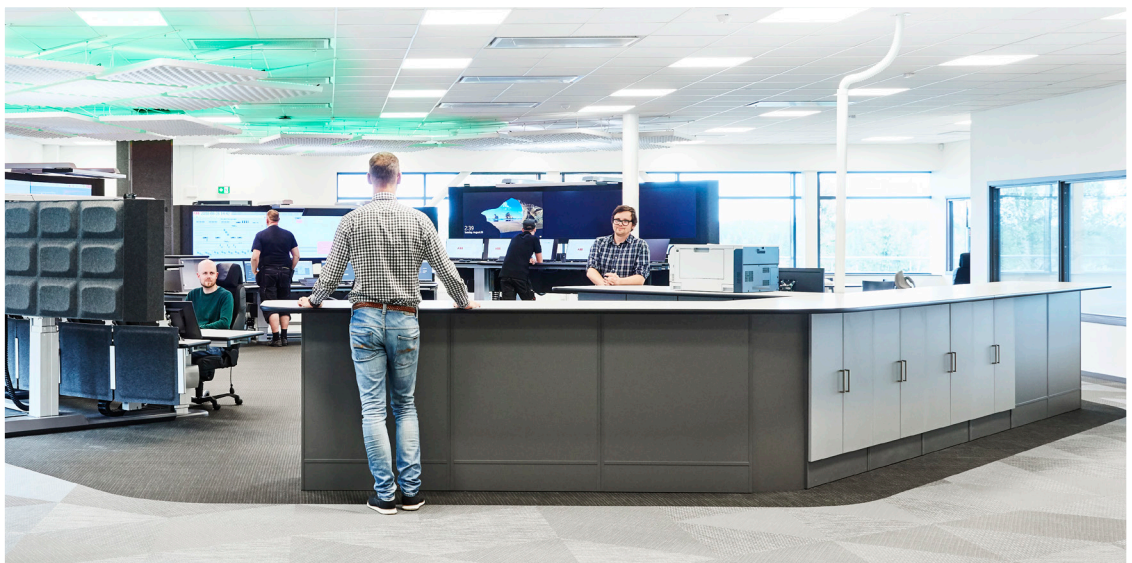
**- decisions that have a great  
impact on productivity, quality and  
safety. The more alert, stimulated  
and harmonious they are, the  
better decisions they make.**

**Our designs can be applied to any  
industry or utility. The reference  
list is extensive: from transport, oil  
& gas, power generation, mining  
and manufacturing process control  
to police, fire and ambulance  
services.**

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# Solutions that put people and productivity first

The control room is the most important room in your facility – it's where daily decision-making affects corporate goals and return on plant assets.



## Control Room Design Pre-Studies

Empowering operators to optimize and safeguard mission-critical processes, ABB designs control rooms that put people and productivity first. Integrative, individual and ergonomic control room design enables the operator to become a key part of the process.

We think that it's important to see the whole picture, this is why 3D modeling is a part of our processes at all levels. Even the remote design study is completed using the design program SketchUp and is easily exported to other 3D software's.

All standard models are also available at 3D model libraries, BIM objects and Sketchup's 3D warehouses.

Involve ABB early in the design process to take full advantage of a holistic design.

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## ABB offers three control room design packages

### Essential

Based on general information in existing plans and photos. Operational information is collected through a questionnaire and remote interviews. Includes 3 design iterations. Generally suitable for small control rooms or projects with a tight deadline.

### Standard

Based on a larger amount of customer data needed to be analyzed before the iterative design can start. Highly recommended for any brownfield projects. Includes 4 design iterations. Generally suitable for mid size or small and complex control rooms.

### Extended

Similar to the medium but enhanced with a human factor analysis. Includes 5 design iterations, and more advanced visualizations. Generally suitable for larger, more complex control rooms/ centers or projects with specific needs regarding documentation.

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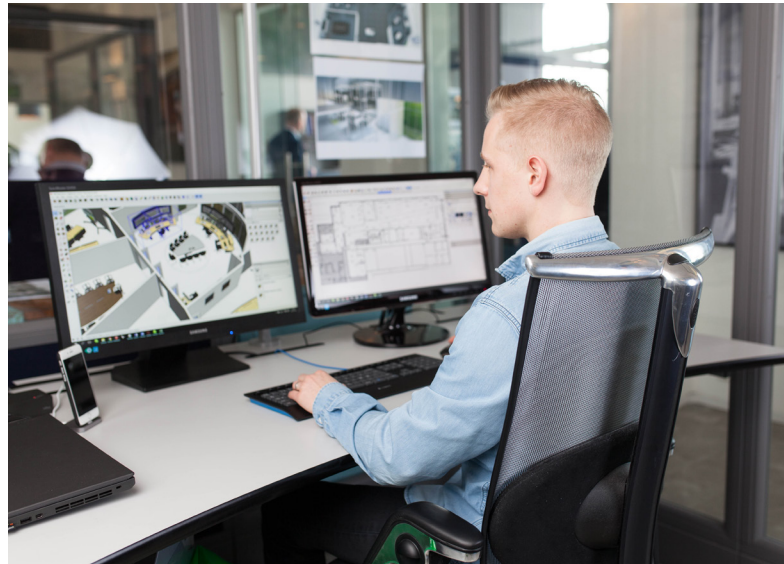
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01 Using VR to explore  
a control room layout  
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02 3D modeling is  
an important part  
of the process  
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03 Visualization helps  
everyone get onboard

## VR

To make the control room design process even more effective we offer additional VR applications on request.

Walking around in VR makes it possible to see and explore the design before taking the leap of starting construction. The immersive nature of this experience makes it easier to spot mistakes and problems in the design that are more difficult to see on a drawing. VR can in this way save many projects a lot of money.

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## Focusing on the Operator



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01 EOW-i3

### The EOW-i

The Extended Operator Workplace platform improves the operators working conditions by providing a complete micro environment that adapts to each operator's needs.

An environment designed with the human factors in focus can in a proactive way avoid dangerous and distracting situations. In both routine operations and critical situations.

The EOW comes with a complete integrated technical package including personal lighting, speakers, monitors, camera, advanced multiclient keyboard and two options for client computer configuration. All of which is preinstalled and wired for plug-and-play installation. The advanced keyboard can be preconfigured.

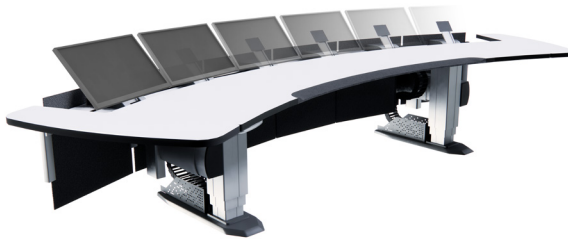
The EOW consists of the Alerto and the CLOV system combined with technical packages.

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### EOW-i Desk system







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01 Alerto B4

02 Cergo B5 and  
DSLX light fixture

### Alerto

The Alerto system is our most premium operator desk system, and the base for the EOW-i system.

It features 4 axes of movement including tiltable screens and deep adjustability of the monitor bord.

The system works well in combinations with traditional video-wall systems and in projects where the complete EOW is to big.

Normally sold without screens and other technical equipment.

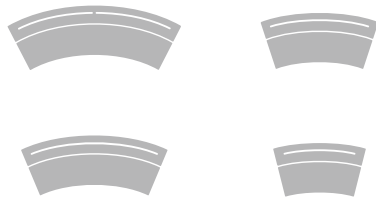
### Cergo Operator Desk System

Built to last in the toughest 24/7 environments with a solid base, and a high pressure laminate worktop. Stable and powerful motorization available on all models.

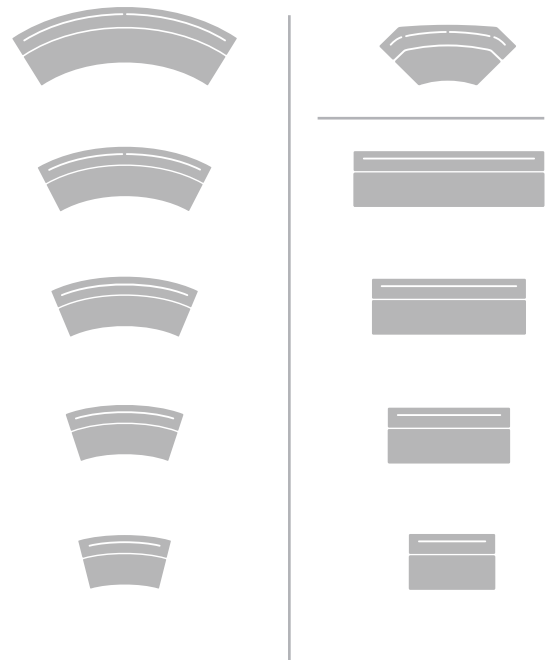
Our desk system comes in a wide range of sizes and shapes. The solid base allows great flexibility, allowing heavy equipment to be mounted as part of the desk.

Normally sold without screens and other technical equipment.

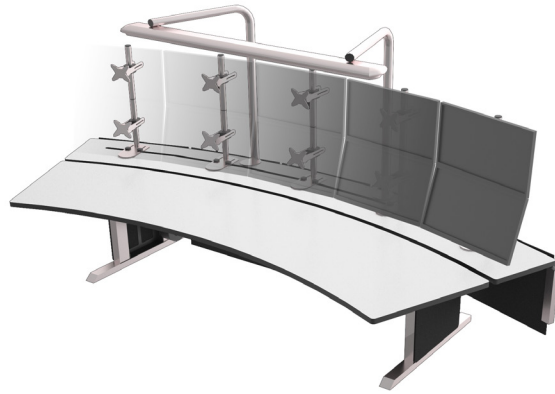
#### Alerto System



#### Cergo System







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01 Comfortio B4

### **Comfortio Operator Desk System**

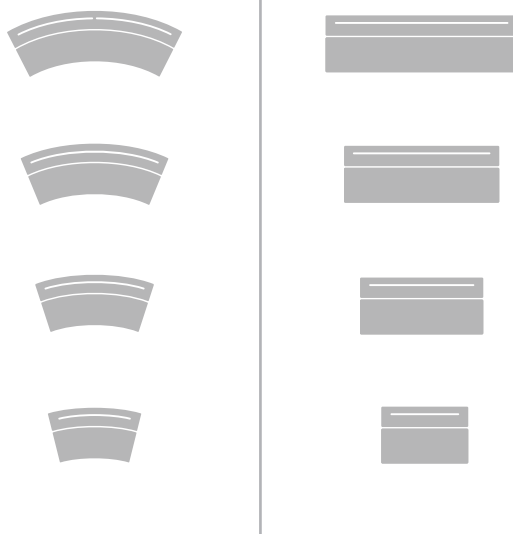
Our simplest operator desk system that still offers great ergonomic features and stability.

This simple solution suits many different applications, with a variety of sizes and versions that can also include separate motorization of the work-surface and monitor boards.

Normally sold without screens and other technical equipment.

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### **Comfortio System**





# Large and small screen holder systems

Big video-walls are good at getting a large common view of a situation. But in many circumstances, it's hard for the operator to connect the situation on the video-wall to a problem at their workstation. The Close Large Overview (CLOV) shows the big picture, but keeps the operator close to the problem.



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01 Sound absorbing  
back side of the CLOV

## CLOV

The CLOV is the large screen holder of the EOW-i and x, it holds 2 - 3 55" screens and is always height adjustable. Its also covered in a sound absorbing fleet, has built-in camera for video-calls, speakers and the DSLX system with sound shower.

It can also be fitted with motorized depth adjustability. This feature makes it very adaptable so that the operator can place the large screens on the right distance for his or her eyes.

There is also a second pair of motors that pushes the lighting fixture in the other direction, so that the light never moves from its optimal position.

Probably the most sophisticated personal video-wall in the world.

## LSS

The LSS is a compact solution for the Cergo system that makes it possible to add large screens directly to the desk. This saves a lot of space but is limited to the smaller B3 and B4 models of the Cergo system.

## The LSS accessory





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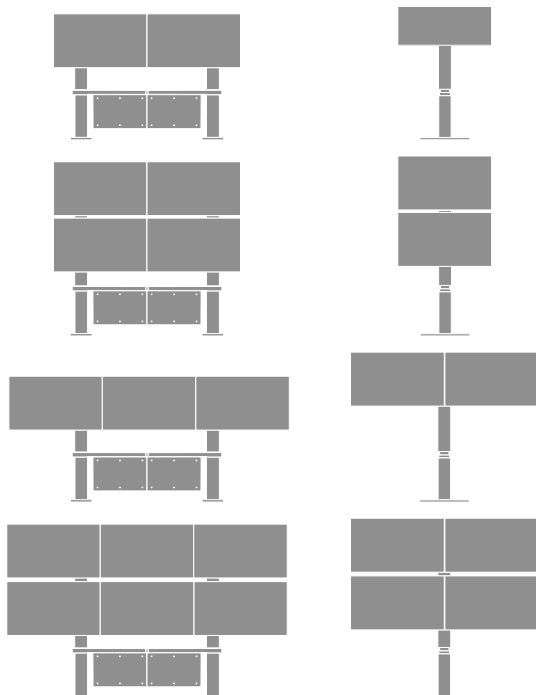
01 MultiScreen Holder  
one pillar

02 EOW-i3 with the CLOV

### MultiScreen Holder

A very flexible height adjustable large screen system, than can be used as a standalone or as an integrated part of an operator workstation. The system ranges from 1 to 6 large screens, and both two or one pillar solutions are available.

### MultiScreen System





**Small screen solutions**

ABB has three different versions of the small screen holders, these are available on all systems except for the motorized option.

**Single row**

The base solution is Monitor holders for flat screen monitors. Mounted on the monitor board.

- Adjustable monitor height, depth, rotation, tilt, and sideways position
- VESA standard mount

**Second row extension**

Extension that makes it possible to have 2 monitors on top of each other, same adjustability as the single version.

**Motorized monitor holder**

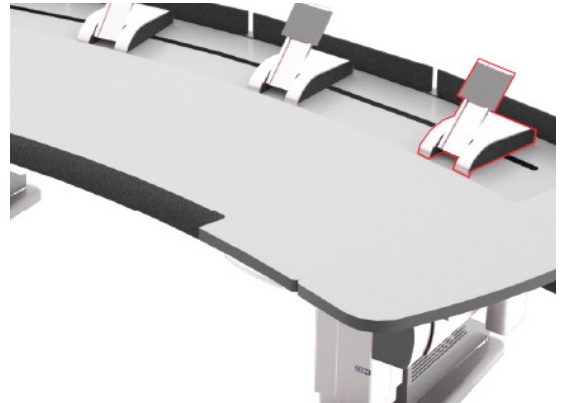
Enables the monitors to be tilted. This adds flexibility and enables a more ergonomic working position. Especially when used together with the large screen solutions.

Only available on Alerto.

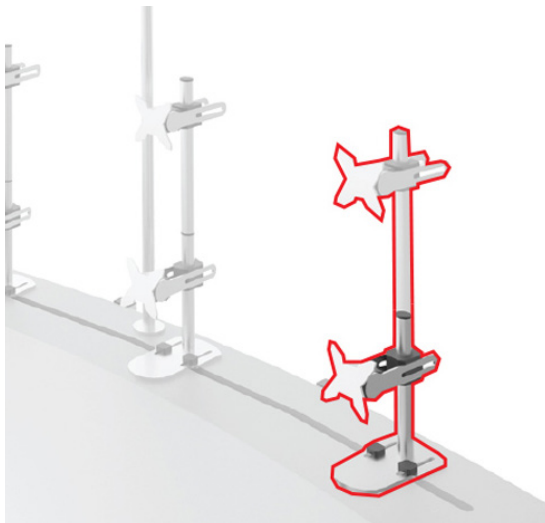
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**Single row**

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**Motorized monitor holder**

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**Second row extension**

# Accessories



The touch controller

## Options and Upgrades

A customer can choose to add standard or custom side boards to one or both sides of the workstation.

Different technical shelf options are available depending on the kind of equipment that needs to be housed.

Protected back panels in different sizes, reduces ambient and PC noise for a more productive operator environment.

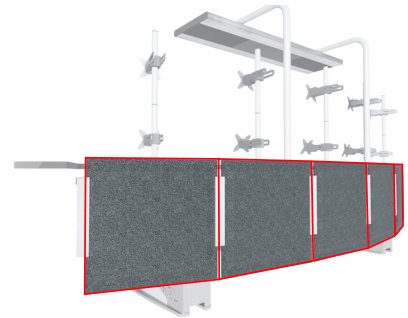
Personal boxes are available, so that every operator can easily take his belongings with him at the end of the shift.

## Hand controllers

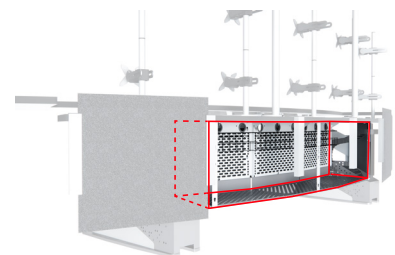
The Cergo line comes equipped with a standard 3 axis controller and 4 programmable setting.

EOW i and x solutions comes with an integrated touch screen controller that can control all possible axes. This is also the base unit for the more advanced personal solution that can store personal settings on a RFID tag.

## Protective back panels



## Technical shelf/CPU box



## Personal Drawer



## Sideboards





# Technical package information

## Solutions

The CLOV comes fully equipped with large monitors, cameras and speakers. You can also equip any workstation with pre-installed and wired monitors. As well as integrated client computers or graphical interfaces to remote client computers.

Our EOW packages also have an advanced multiclient keyboard with built in touch screen. This gives great integration possibilities and better HF functions from the single keyboard.

## Integrated

For the integrated client option the included computers are mounted and integrated in the EOW. This makes the EOW a complete stand-alone product providing flexibility and an easy installation process.

## Remote

For the remote client option the computers are moved away from the control room and typically placed in a server room. This KVM-solution is well suited for projects that have special demands regarding computer performance or have an already existing solution.

The remote solution also minimizes noise and heat generated in the control room environment. Service and repair of the computers can also be done without interfering with the operators or disrupting the process in the control room. No client computers included in the package.

Please note that the EOW does NOT include any System 800xA software or licenses.

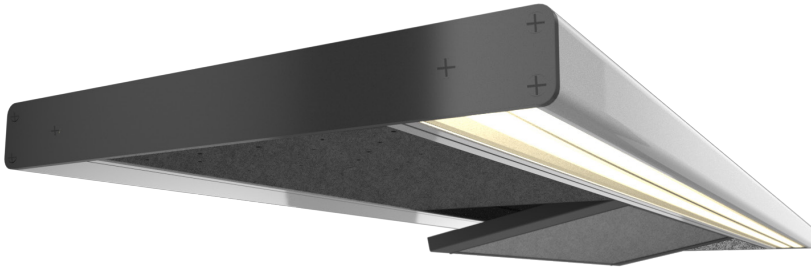
Integrated client computers



Advanced multiclient keyboard



## DSLX and Noble Light



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01 DSLX 1500

### **DSLX**

Is the lighting solution for the EOW system. And it has been designed with the control room in mind from the beginning. Decreasing screen glare has been taken into consideration.

The LEDs are powerful and can be dimmed from cold to warm whites, something as small as the temperature of the light can affect the hormones that control a person's sleep, and increases the alertness of the operator during a night shift.

Sound is one of the most common problems in a control room, therefore we equipped the light with a "sound shower", our name for a directed speaker. This is very useful as it limits the amount of sound being emitted from an operator's alarms or radio.

The DSLX is available in 2 sizes, with or without sound shower.

Light is crucial to humans, it changes how we see the world and our state of mind. ABB has built a light solution from the ground up, to help operators stay more alert and vigilant.

### **Noble Light**

Is a less specialized LED lighting solution than the DSLX.

It covers the needs of an operator, even on large workstations (available in two sizes).

It has functions like dimmable light and a power save mode that kicks in after 9 h to conserve energy if the operator leaves it on during the night.

### **Noble Light 1500**





# Collaboration Table and Software

The perfect solution for informed discussions and collaboration between teams on all levels.



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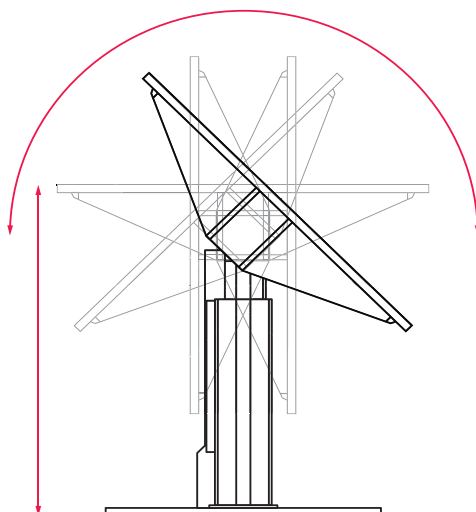


02

01 Collaboration Table

02 The collaboration table has use cases not only in the control room but also adjacent areas.

03 Collaboration Table motorized adjustability



03

## Collaboration Table

The perfect solution for informed discussions and collaboration between teams on all levels in your plant. From operator shift changes to project team gatherings and management meetings this is the right solution to leverage the performance of your operations management software.

With its large interactive touch screen it enables users to collaborate and share their knowledge, ideas and competences. In this way it contributes to more effective operations. Highly ergonomic with motorized tilt and height adjustability.

Works well together with ABB Ability™ Manufacturing Operations Management and other touch based software.

### Desk

- Desktop of corian, with flush screen and capacitive touch controls
- Highly adjustable height and angle
- Motorized pillars and chassis made of high grade anodized aluminum
- Integrated steel plate feet

### Screen

- 55" Full HD IPS capacitive touch screen
- 10 ms response time
- Scratch and liquid resistant
- Up to 60 simultaneous multi touch inputs and palm rejection
- Superior viewing angle with accurate and consistent color rendering

## What else do you need for a good control room?

The operator workstation is not the only important part of a good control room environment. Cable management, storage, and seating are also areas which can increase safety and productivity.

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01 Showing single and double cap desks  
—  
02 Showing the Cable Duct Tower

### **CAP Desks**

Some equipment like hardwired switches or bulky com radios are not easily fitted on a conventional workstation and require a specialized solution.

To support these kinds of installations we have developed the Critical Action Panel-Desk, referred to as a CAP-Desk.

It comes in different standard sizes and layouts which makes it easy to customize and implement everywhere. The 19" standard panel with a height of 10U (Unit for measuring height of rack mounted equipment) makes it compatible with standard equipment such as emergency stop buttons and communication radios etc.

The CAP-Desk is fully compatible with other ABB control-room products including the Cable Duct Tower.

### **The Cable Duct Tower**

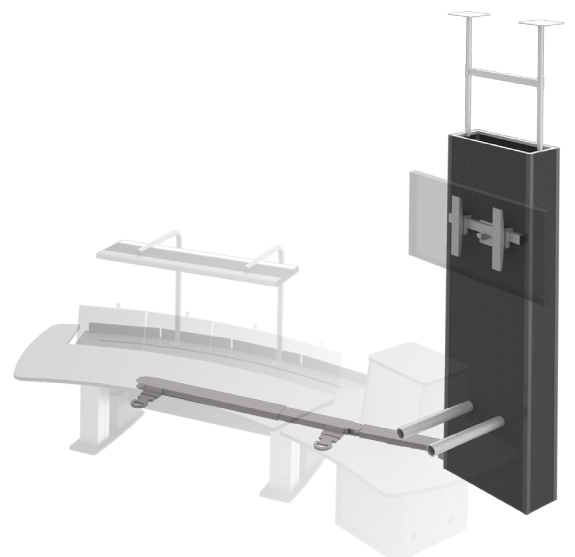
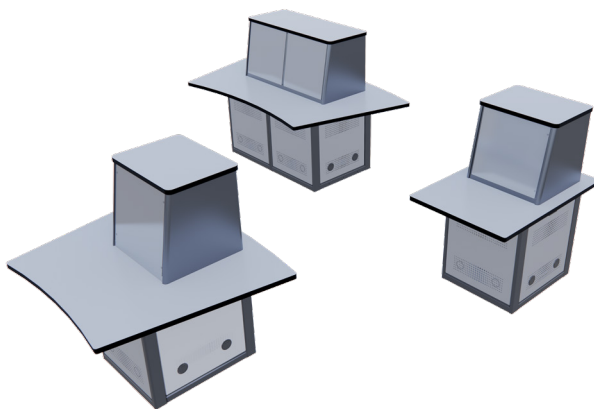
Cable management is important, unsecured cables can be a potential danger that can cause unplanned shutdowns and safety risks.

#### **Simple arrangement**

The Cable Duct Tower offers an effective and secure way to arrange cables from the operators workplaces and from hard-wired equipment installed in the CAP-Desk. By divided cable-channels, power and network cables the Cable Duct Tower ensures good transmission.

#### **Lowered costs**

By using the Cable Duct Tower, the cables can be drawn through the ceiling which results in higher flexibility and lowered costs compared to using a traditional raised floor. Estimations from Oil & Gas projects shows savings of at least \$1000/m<sup>2</sup>.







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01 Operator Chair

02 Some of control room solution storage options

### 24/7 Seating

Many control rooms are used 168 hours a week, a big difference from the normal 40 hours office week. This increases wear and tear that the product is subject to and can significantly shorten its lifespan. This is one of the reasons its important to choose an operator chair that is specifically designed for an 24/7 environment.

For the prolonged working time that is common for an operator, it is also recommended to have a chair that can be adjusted to his or her individual needs. This can help in avoiding the kind of back and neck problems associated within the profession.

We recommend the following functionality:

- Seat cushion length and tilt.
- Backrest angle support.
- Height and weight adjustment.
- Air pressure of the lumbar support.
- Tilt rocker.

### Storage

In a control room, structure and order is important, but although we are moving into the digital age some things still need to be on paper.

We have designed a series of functional furniture that creates a clean working space for operators. With the same quality and design as the operator desk systems. These products give smart solutions to store objects that aren't needed on a daily basis, and help keep the control room organized.



02

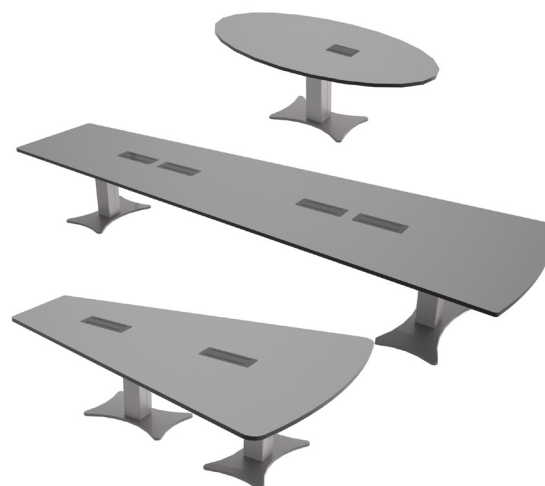
### Meeting Tables

Collaboration and communication is important for a productive environment.

The meeting tables come in different standard sizes and shapes to fit meetings and presentations with 4-15 participants.

The robust and centered Aluminum legs result in a sturdy table with generous space for your legs.

### Examples of meeting tables



## Specialized workstations solutions

Standards are good, but sometimes necessity calls for a special solution. We design and build over 100 custom workstations yearly.

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Advance adaptation of  
the Comfortio system

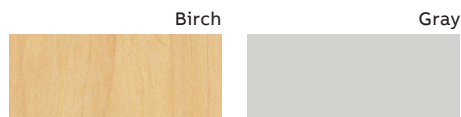
### Custom solutions

Every year we design many custom solutions ranging from small adaptations in color to custom shapes and design or equipment that is mounted on the table top. Contact control room solutions to discuss what is possible.

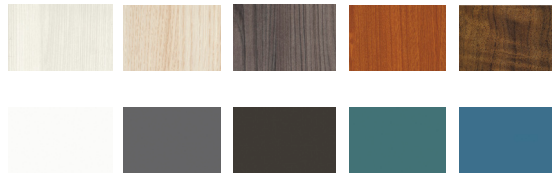
Below are the two standard high pressure laminates together with 10 samples of optional laminates. This can be selected with any of our workstation systems.



### Standard topboard finishes.



### Many different finishes are available on request

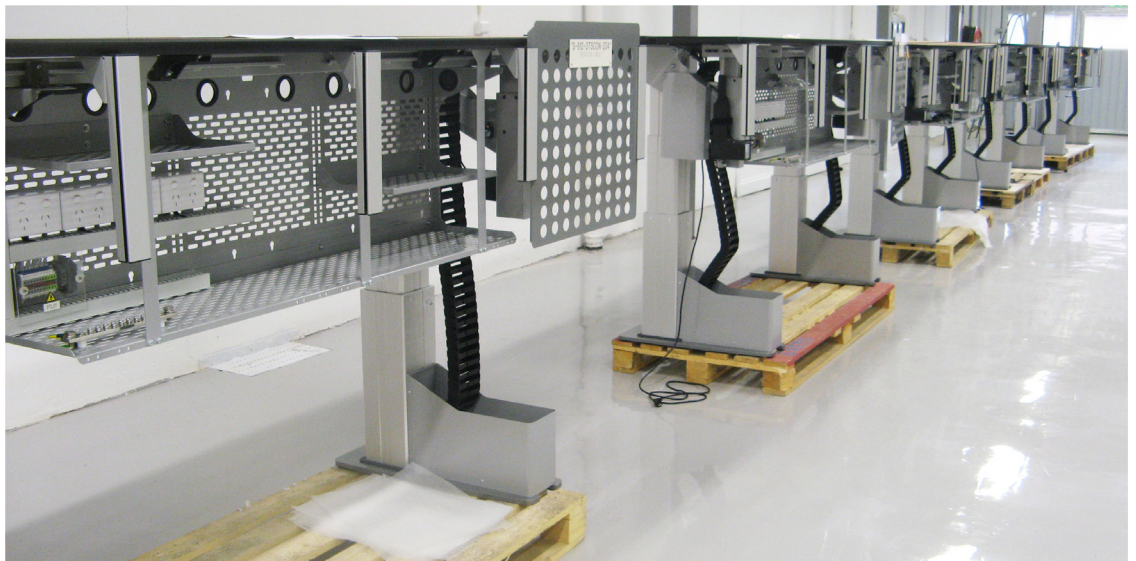


### Custom Comfortio R4



## Installation of the control room and services contracts

ABB has an extensive global service organization to support your assets and processes throughout the life-cycle of your operation.



— Operator workstations equipped with technical shelves, ready for factory inspection.

### Installation

Many of our solutions can be supplied as semi-assembled products, and can therefore be assembled by customers themselves, without ABBs involvement.

In other cases we can offer installation on site by certified personal, in most places of the world. Contact control room solutions to get a quotation.



For more information please use the contact section to reach your local ABB sales organization or e-mail us at **SE-cgm-info@abb.com**

<b>Data sheets and brochures</b>	<b>Article number</b>
ABB Control Room Design	3BSE086570
EOW-i Intelligent Extended Operator Workplace	3BSE086572
EOW-x Extended Operator Workplace	3BSE086573
Alerto Operator Desk System	3BSE086567
Cergo Operator Desk System	3BSE086569
Cergo Operator Desk System - Accessories	3BSE086568
Comfortio Operator Desk System	3BSE087013
DSLX High frequency dimmable lighting module	3BSE087014
MultiScreen Holder	3BSE087016
Screen Wall CLOV	3BSE087017
Control Room Design Studies	3BSE090819

All our datasheets and brochures are available on the control room solution webpage:  
**<https://new.abb.com/control-rooms>**

**abb.com**  
**new.abb.com/control-rooms**

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