

Ergonomics bestseller in the control center: control room console for use in 24/7 operation

A control room desk that impresses the experts: the masterpieces of the Stratos range are used in hundreds of control rooms. Whether the basic version X3, the mid-range model X9 or our premium version, the bestseller Stratos X11® – every desk meets the legal standards for control center workstations and is constructed in our German furniture manufactory. The choice is yours: the right Stratos original for every budget and every requirement!

COMPARE STRATOS MODELS!



Video: Get to know the No.1 of control center table. Get acquainted with the Stratos dimension!



Convincing advantages of the Stratos X11® – the champion among control station desks

- Each desk handmade in German furniture manufacture
- Height adjustment can be continuously adjusted by electric motor
- Fully complies with legal ergonomics requirements
- **Robust construction**, specially designed for 24/7 operation
- AlarmLight function ensures shortened response times



• Contemporary, clear look; corporate design concepts

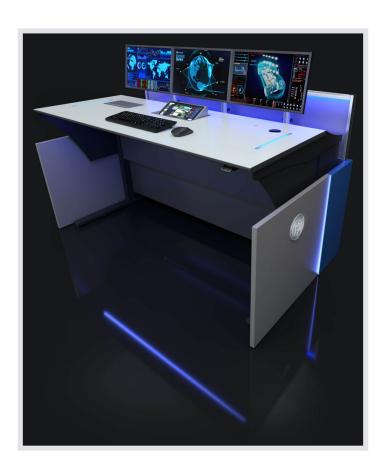
<u>01</u>

Impressive optics and strong performance

Response times effectively optimized! Equipped with the AlarmLight – in the side panels and in the table surface, in the operator's direct field of vision. In this way, employees perceive visual alarms in fractions of a second. Even in the standing position of the desks, the team does not miss any color change.

X11

THE OPERATOR'S DESK





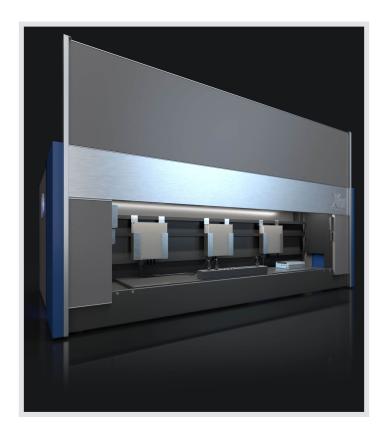
<u>02</u>

Supply room - every cable in the right place

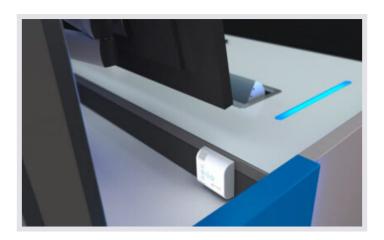
A tidy look without annoying cables and dangerous tripping hazards? No problem with the Stratos X11[®] system. All models of the control station console have illuminated supply rooms that can accommodate even large quantities of cables and technical installations.







< class="img-cnt-dark_header title" > 03 Al-supported sensor competes with the nose

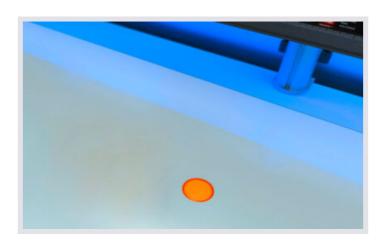




test

Fatigue-free work in a healthy climate! The VOC room air sensor (VOC = Volatile Organic Compounds) replaces the human senses. If the air quality deteriorates, the operator receives a message immediately. Temperature, humidity and air quality are constantly checked.

< class="img-cnt-dark_header title" > 04 Login / logout process within seconds



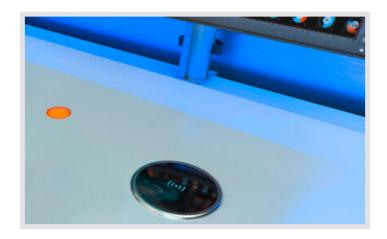


test

Flexible and secure: With a user card or company ID card, login and logout are carried out via an integrated card-reading sensor. Simply placing the card is all that is required. The system recognizes personal identification at every workstation. Comfort without compromise.

< class="img-cnt-dark_header title" > 05 Stratos consoles always ensure 100 percent!







test

The smartphone must also be at hand in the control room and of course show sufficient power at all times? The new Qi charging pad – integrated into the surface of the Stratos control room desk – offers a convenient solution. Wireless charging! The power socket was yesterday.

<u>06</u>

Ergonomics literally "at the push of a button"

Health is the focus of the Stratos X11[®]. The control station tables are raised to the desired level by motors at the gentle push of a button. In compliance with ergonomic principles, our development team has



designed all components in such a way that cables are concealed even in the upward movement.



07

Full control in the blink of an eye

This component distinguishes the Stratos X11® in its function as a control room console: Comprehensive and constant overview of all systems is provided by the JST CommandPad® with the myGUI® user interface – optionally available as (A) integrated solution directly in the console surface or as (B) flexible desktop variant.













New layout, new flexibility: With a **myGUI® user interface** optimized for touchscreens, the handling of system control in the control room convinces with maximum efficiency. As a user interface for the real-time control system MultiConsoling®the myGUI® ensures effortless and superior steering of the entire infrastructure in the control room thanks to the intuitive 3D layout of its own working environment. You take control!

With the **JST CommandPad**®, a control panel specially optimized for 24/7 operation, the operator has the myGUI® user interface and thus the entire control room control permanently in view. Whether in the integrated variant or as a flexible desktop solution, an endless selection of predefined myActions can be triggered with just a tap of the finger.

SELBST KONFIGURIEREN!

08

Corporate design makes Stratos an eye-catcher

Whether signal red or magenta, sapphire blue or light green – with its impressive variety of colors, the Stratos X11[®] adapts to your company's corporate design. All models of the extraordinary control station desk thus set colorful accents in the control room. Visual bonus: All Stratos consoles are equipped with high-quality JST stainless steel logo; also available with individual company logo upon request.





Making the world a little greener together

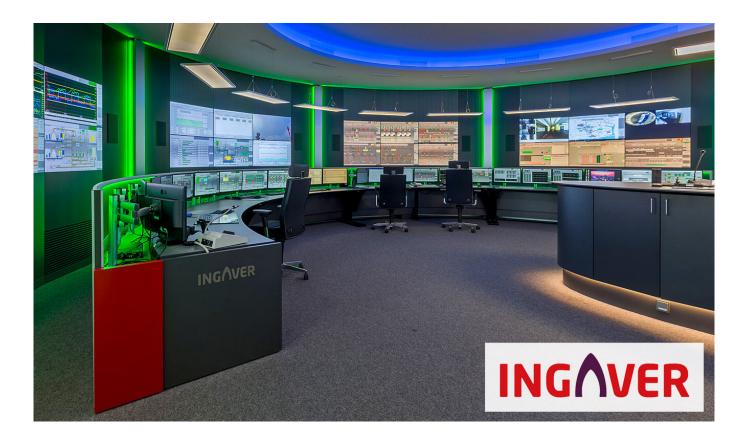
Ergonomic high-tech desks and a pristine forest. How does that fit together? It's simple: for every single control room console our customers purchase from JST, we plant a tree in Madagascar. Together, we are committed to more sustainability and support local agriculture.

How to become a tree sponsor





• Study by the Federal Institute for Occupational Safety and Health (PDF)

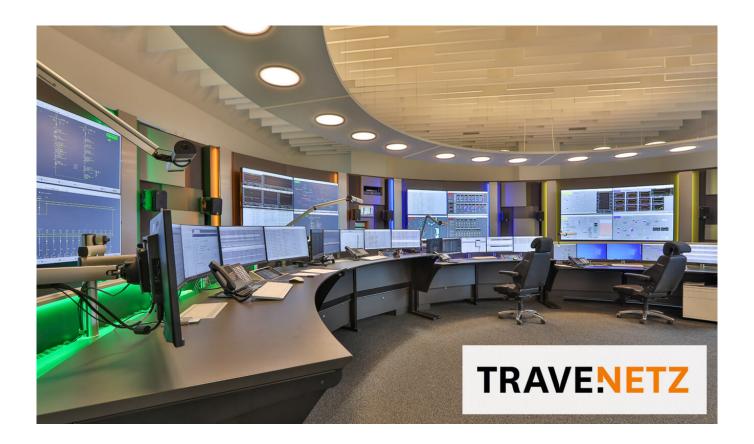


Carefully thought-out space planning characterizes the new control room at <u>INGAVER GmbH</u> in Bremen. The custom-built Stratos consoles offer numerous ergonomic benefits. In addition to generous legroom and a particularly deep tabletop with a lowered monitor placement surface, these include in particular the electromotive height adjustment, which, for example, makes it possible to switch between sitting and standing. Every operator can adapt "his" Stratos X11 to his specific needs.





Futuristic design – the new control station at <u>Heidelberg Materials</u> in Ennigerloh is not only visually impressive. It's the inner values that count. For example, employees now benefit from the advantages of ergonomic furniture and a methodically thought-out technical control room concept.





The topic of "ergonomics" played a central role in the furnishing of <u>TraveNetz's new network control center</u> in Lübeck. Here, for example, by means of work tables that are easy on the back. The height adjustment of the Stratos X11® operator consoles up to standing height enables an alternating body posture and avoids damage to health.



Functional planning and proactive visualization of the various systems – at the Helmholtz Zentrum Berlin, visual appearance and design obviously have a high priority. For example, the corporate design of the <u>Helmholtz Center</u> was taken up with the stainless steel logos in the side panels of the operator consoles.





The individual production of the control center furniture makes it possible: In the new control room of <u>protec service GmbH</u> in Hanover, the side panels of the control center tables were designed in the corporate design of the security service provider in accordance with the customer's order.





Highest ergonomic requirements: In the <u>FIS control station</u> (production and control system) at VW Wolfsburg, employees are monitoring complex systems; from the receipt of orders for the plant to the run-in to the assembly lines.



The operator team in the control room of <u>Messe Berlin</u> benefits from the extensive experience of JST specialists. The perfect combination of technology and design – here in interaction with the AlarmLight on the Stratos X11[®] consoles and the large screen wall – creates ideal conditions for smooth operation.





The control room desks of the Stratos series (here the "Curve" model) allow a change between sitting and standing height, thus preventing health hazards. "Employees use the opportunity to change positions several times during their shift," explains project manager Waldemar Seibel from <u>Ineos Oxide</u>.







The newly created workstations in the <u>Bremen Police Department's video control center</u> were installed according to the latest ergonomic principles. This includes, for example, an electromotive height adjustment of the control room consoles, which allows different users on 24/7 shift duty to adjust the Stratos desk to individual needs.











Legislator about workstations with Visual Display Units in Control Rooms

Thanks to many years of experience in the planning of control rooms, JST has a wealth of knowledge and particularly deep Insight into the work of operators. For this reason, JST supported the Federal Institute for Occupational Safety and Health in the study "Workstations with Visual Display Un1ts in Control Rooms" Use this know-how to plan your control room according to the best technical and ergonomic aspects.

THE BAUA-STUDY



Would you like to find out more about JST's Stratos X11®?



I would like a callback for a non-binding consultation from the control room specialists at JST!

+49 4161 54044-0

Make an appointment for a consultation by phone. The consultation is **free of charge and without obligation**.

I would like to visit the Europe-wide unique control room simulator!

SCHEDULING A "TEST DRIVE"

Visiting the control room simulator is free of **charge**.

We ask for registration and reservation of dates.



Gerne auch als interaktives Online-Meeting



I would like to receive "The Great Practice Book of Control Rooms" from JST!

REQUEST FREE OF CHARGE

The praxis book is free of **charge** for JST customers.

Chosen by leading companies and institutions

















What clients say about their experience with JST – Jungmann Systemtechnik ${}^{\circledR}$

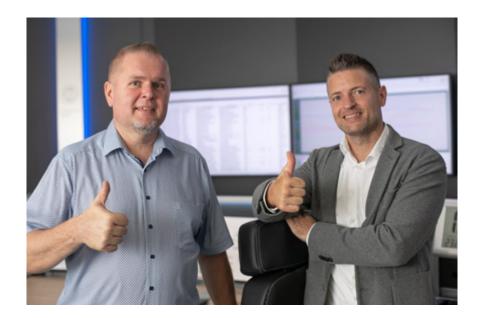




"Colleagues are enthusiastic by the progress we've made here."

Plant engineer // Colleagues from engineering







"High flexibility, reliable performance, no more annoying chair moving – that was already a great experience!"

E&I Engineering BASF SE // Consultant JST





VOLKSWAGEN SACHSEN

"We have achieved significant improvements in terms of work quality – this is also confirmed by the feedback from colleagues."

Technical IT project manager // Subdivision manager material control center







"JST was able to offer us the best overall package in terms of furniture, technology and customer service – an equal acquisition."

Head of dispatching/gas/water/heat/waste water network management

TO THE PROJECT



TRAVENETZ

"Technology, ergonomic furniture and large display walls – all from a single source. That was one of the convincing reasons why we chose JST."

Head of Network Control Center TraveNetz / JST Consultant







"The visit to the control room simulator and the expert advice were great – one of the biggest deciding factors for us."

Consultant to the management of EFM (de-icing and aircraft towing at Munich Airport) GmbH







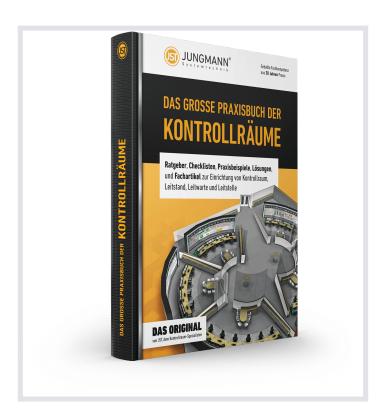
"With today's technologies and control room solutions, optimal workplaces can be created. Companies should seize this opportunity, because the control room is at the forefront of the whole thing."

Sales Manager IT and Automation of PROBAT-Werke von Gimborn Maschinenfabrik GmbH

TO THE PROJECT

THE GREAT PRACTICAL BOOK OF CONTROL ROOMS





Guidebooks, checklists, practical examples, solutions and **technical articles** for the installation of control rooms, control stations and control centers

REQUEST FREE OF CHARGE

The great practical book of control rooms is free of charge for JST customers and interested parties.

FAQ

For which applications are the control room desks and control room consoles suitable?

The **JST control center table** not only stands for **high quality and adaptability**, but also for planning security and investment protection. A control room desk from the Stratos X11® range is designed for the flexible installation of all workplace monitors in **accordance with official handling instructions and guidelines**. The operator can therefore carry out his tasks safely, without errors and without short or long-term damage to his health. The Stratos X11® control center table not only stands for high quality and adaptability, but also for planning security and investment protection. It counteracts impairments such as fatigue of the eye muscles or complaints in the shoulder-neck area. This **allows to maintain the efficiency and health** of the operators **as long as possible**.



What are the special features of the control room console?

- **The stability:** The Stratos X11[®] control room table is manufactured exclusively in high quality. It is recommended for **demanding operation in control rooms**, where very resistant materials are usually required. Furthermore, it is... "**Made in Germany**".
- **Ergonomics:** The Stratos X11[®] complies with the "Handlungshilfen für Bildschirmarbeit in Leitwarten" (Guidelines for working with display screen equipment in control rooms) of the **German Federal Institute for Occupational Safety and Health** (BAuA).
 - This is because the activities of operators in a control room fall within the scope of DGUV Information 215-410.
 - This regulation is the basis for the Stratos X11[®] designs and JST space planning.
- Design and architecture: An appropriate design has a motivating effect, prevents absences due to illness, increases satisfaction and reduces the fluctuation of your employees in the long term. The equipment and arrangement of the workstations is based on the special orientation of your processes in the control room. In doing so, we examine the information hierarchy and check that the viewing angles and viewing distances to large screen walls are observed. Of course, we take into account the employer's liability insurance association's workplace regulations (escape and traffic routes, control panels, etc.) and the EU guidelines for computer workstations.
- Flexibility: Whether U-shaped, L-shaped, convex, concave or simply straight installed; the Stratos X11 control center table can be combined in almost any variant. Stratos X11 is available in various widths from 120 cm to 260 cm. The model "Curve" is available with a width of about 300 cm or about 360 cm. All corner elements and straight units can be combined as desired in a round shape.
- Handling safety: Our AlarmLight in the control center desk is an LED RGB light strip located on the Stratos rear wall above the monitors, right/middle and right/down. The AlarmLight is used on the one hand for good optics, on the other hand it increases the attention drastically in case of critical alarms. Event-controlled light signals are demonstrably perceived more strongly by the entire team than information on a monitor. The AlarmLight is controlled by your monitoring or process control system to change color depending on the event. Flashing and pulsing of the AlarmLight is also individually adjustable. After prior technical coordination, JST will install the LED RGB light band, the control module and the software completely for you.

What legal and occupational health requirements do the control room consoles comply with?

DGUV Information 215-410 (formerly BGI 650): This **guideline** of the "Deutsche Gesetzlichen Unfallversicherung e.V." specifies the safety, occupational medicine, ergonomic and **occupational psychology requirements** for the design and operation of **Screen and office workstations**.

Screen work in control rooms: These guidelines for the ergonomic design of workplaces in accordance with the Display Screen Equipment Ordinance, now the **Workplace Ordinance**, on behalf of the Federal Institute



for Occupational Safety and Health (BAuA) are based on **important findings** that are **particularly important when planning a control room**.

DIN EN 527-1:2011-08: This standard is of European origin and contains **specifications for dimensions of office desks** (size and height of the work surface, dimensions of the leg room) and for measuring these dimensions.

DIN EN 527-2:2003-01: This standard is of European origin and contains **mechanical safety requirements** for office desks with regard to construction and stability.

DIN EN 527-3:2003-06: This standard is of European origin and contains specifications on the test conditions, test equipment, test procedures and test report with regard to the determination of the **mechanical strength of the construction** of ready-to-use office desks and their stability.

Electrically adjustable: The Stratos X11 control room desk **optionally available with continuously variable electromotive standing/sitting height adjustment.** The height adjustment range is 650 mm to 1250 mm according to DIN EN 527-1:2011.

For height adjustment, the specified safety distance (danger of crushing) of 3 cm according to DIN EN 527-1:2011 is maintained between table tops and between table top and side panel.

To minimize the risk of accidents during height adjustment, a **collision protection sensor** is integrated.

For example, if the tabletop moves onto a solid object, the motor stops.

Material damage is thereby avoided as far as possible.

Especially practical: the **Memory function** for standing-height adjustment.

As an option to the standard operating unit of the standing height adjustment, the operating comfort can be increased. **Three altitude settings are stored** and accessed at the touch of a button.

For an optimal standing/sitting position, a display informs at which height the table top is currently located.

3D Monitor arms: With the **optionally available 3D monitor arms**, the operator can individually adjust the visual distance and angle of view to his needs.

Even at a short viewing distance, there is still enough desk space in front of the monitor, e.g. a DIN A4 sheet.

The viewing distance is maintained at 450 mm to 750 mm according to DIN EN 527-1:2011.

Lowered monitor shelf space: The monitors are lowered for ergonomic reasons 10 cm behind the worktop on a separate shelf.

This enables you to achieve a head tilt of approx. 15°, which prevents tension in the neck area. Especially **employees with progressive glasses** will not want to miss this feature anymore.

Comfortable foot space: Occupational physicians pay particular attention to sufficient depth of foot and leg room.

At this point, Stratos X11® offers far more than the guidelines for screen workstations prescribe.



As a result of a predominant monitoring activity, the operators lean back in their chair, stretching their feet far forward under the table.

During the construction of the Stratos X11[®] this was taken into account. **Leg and foot space** is maintained in accordance with DIN EN 527-1:2011.

What other special options do I get for my control room console?

PowerPort data pull-out: Supply your notebook with power and data quickly and easily or simply charge your mobile phone without having to search for a nearby power outlet. **The PowerPort data pull-out is integrated flush in the cover plate** of all standing and technical containers. Optionally also available for the monitor surfaces or conference tables.

PowerPort Data-Box: The PowerPort Data Box is recommended for flush integration into the work surface. The assembly can be designed individually.

Lamp in Porsche design: The chic compact fluorescent lamp with microprism for glare-free work, material: anodized aluminum spring balanced joints, lamp head multiple adjustable, light color neutral white, 4000 K, color rendering Ra=82 230 – 240 V; 50/60 Hz, power consumption 12V.

DisplayBox: Faster detection, faster reaction, faster interference suppression! With the Stratos X11[®] expansion unit "DisplayBox", the workplace adapts to the respective situation. If required, for example Large screen displays can be moved in or out from a DisplayBox located behind the Stratos control desk. This way you get **all the important information at the right time** and in the right place at a glance.

Experience more at a planning workshop in Kontrollraum-Simulator

Having a vision of the future is good. Experience is better! Visit the control room simulator, unique in Europe, which combines state-of-the-art technology and the latest ergonomic know-how. The control room of the future. The **extraordinary**: Here you can touch everything and try it out for yourself.

MAKE AN APPOINTMENT

The tour of the control room simulator is **free of charge**. **We kindly request that you register and reserve your appointment.**

Watch video



What would you like to do next?

I would like

- request the free control room practice manual
- a callback for a non-binding consultation
- visit the control room simulator in Buxtehude
- experience a digital 360° tour in a control room
- learn more about control rooms at the ko:mon congress