

Client:



Kategorie: Switch room.

Control room as a building block for climate-neutral energy supply



JST control room: Cleverly and prospectively designed - with the new control center, those responsible at Stadtwerke Schwerin are also able to easily integrate further climate-friendly energy generation plants and their control systems. The MultiConsoling® management system allows efficient and flexible operation: each system can be switched on at any workstation or on the large display wall in the blink of an eye.

When the district heating network was built in the 1970s and 1980s, nobody could have imagined just how much the ongoing expansion of district heating would one day provide relief for a hot topic. Today it is clear: while the amendment to the German Building Energy Act is causing unrest up and down the country, around 65 percent of Schwerin's residents can sit back and relax. The Federal Economics Minister's demand also applies to them: the switch to renewable energies when installing new heating systems is mandatory (from 01.01.2024). However, as district heating customers, many Schwerin residents do not have their own boiler room. For them, the Stadtwerke take over compliance with the requirements from Berlin.



Schwerin gradually creates basis for "heating act"

A good reason for the local energy supplier not only to systematically expand the district heating network in Germany's smallest state capital, but also to ensure that the necessary conditions are in place to exceed the government's standards. The measures required for this are being tackled successively on site. One stage on the way to a sustainable and therefore climate-friendly heat supply: the new control room, which JST – Jungmann Systemtechnik® realized in cooperation with Stadtwerke Schwerin.

Energy supply: from geothermal sources to hydrogen

Fundamental modernization work has recently been carried out at the southern Cogeneration plant site: More efficient and at the same time more environmentally friendly gas turbines, which can also use proportions of green hydrogen for combustion, are just one element of the energy supply. "At the moment, natural gas is still our main source of energy. But our first geothermal plant is now going into operation and we want to continue along this path," says immission control officer Thomas Vinzelberg, explaining the Schwerin concept, which also includes a supplementary biogas plant.

Control room bundles systems with flexible KVM technology

In other words, many individual building blocks to even exceed the legally required target of 65% climate-friendly energy supply for heat generation in the future. It is precisely at this point that the value of the investment in the new control room becomes clear, especially in the <u>flexible KVM technology</u>

<u>MultiConsoling</u>[®]. The intuitive control room management system can be scaled effortlessly. New, renewable energy systems can be easily integrated. Thomas Vinzelberg: "The solution from JST is an optimal way for us to bring our different systems together in one control room."

The team of boiler attendants quickly found their feet

The 30-strong team at the Schwerin control room has not only quickly found its way around the convenient real-time operation of its systems. <u>Ergonomic furniture</u> and the <u>clear large-screen visualization</u> are also highly appreciated by the boiler attendants.

Control room before and after renovation.

Logbooks "are particularly interesting"

Division manager Klaus Rüger, responsible for the operation of the power and heating plants at Stadtwerke Schwerin, sees a particular benefit in the <u>JST myLogin®</u> solution. The software enables a lightning-fast login and logout process directly at the operator's workstation. Limited authorizations are assigned via a keycard, but individual screen layouts are also saved, for example. "The traceable logbooks are particularly

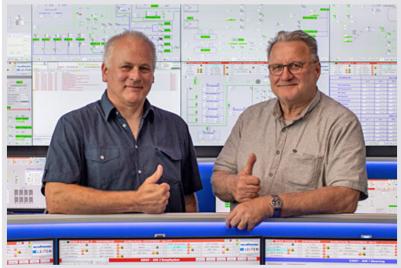


interesting," says Klaus Rüger, "now we can track every single entry."

Satisfied? Starting signal for control room no. 2

The experts for energy supply are convinced that they have taken an important step towards the future with the new control room and, looking back, praise the "high reliability" of the JST team. This satisfaction is backed up by another fact: Directly following the expansion at the South site, the go-ahead was given for a project at the Schwerin Lankow power plant site, which is also receiving a <u>new control room</u> with future potential in cooperation with Jungmann Systemtechnik.





"During our market research, we took a close look at the JST website. We liked what we saw there, especially the many reference reports. At the subsequent kick-off meeting in the control room simulator, it was obvious: this meets our technical requirements and also offers something for the eye."

Thomas Vinzelberg (left) // Klaus Rüger



IT/control technology engineer and immission control officer //
Head of the generation division (both Stadtwerke Schwerin)



"Ergonomics was one of the topics that had a major influence on project planning. In the first step, we created a common framework based on the latest scientific findings. The subsequent measures then went smoothly hand in hand - also thanks to the extremely good cooperation with the external planners. As with all our projects, we listened carefully to the requirements of our clients in Schwerin. They wanted an optimized use of the card for the JST myLogin® registration process. Our software specialists immediately got to work. The resulting "toggle" function will soon be incorporated into a functional update as a further development."

Dominik Zepp

JST Consultant

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The components used in this project:





<u>DisplayWall</u> with special S-PVA panels for reliable 24/7 operation - optional with proactive alarm function



<u>MultiConsoling</u>[®] **System** – complete control room system for workplace, monitor wall and other systems



myGUI® user interface - in the intuitive 3D design of your control room for maximum user comfort



<u>Stratos X11[®] control room desk</u> – optional with height adjustment and proactive AlarmLight system



 $\underline{\textbf{PixelDetection}}^{\texttt{®}} - \text{proactive alarm software to shorten response times}$



<u>JST CockpitView®</u> – dashboard function to compile the most important systems on one monitor



JST myLogin® - security concept with an automated sign-in and sign-out process



Planning / 3D planning – architecture, ergonomics and technology from a single hand

JST CommandPad® – efficient system control at the touch of a finger

OPAL X11® – acoustic ceiling sail – for optimization of sound level and lighting

AlarmLight - safe, visual alarm detection

ControlRoom-Automation – secure and fast processing of alarms

Audio system - for acoustic signals and alarms

PSM Proactive System Monitoring – monitoring of all devices based on permanent status and diagnostic data

Other projects with a similar task



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