

Client:



Kategorie: Production control center.

## Synchrotron radiation: The "success story" continues!



JST control room: Quality not quantity! The view through the porthole gives a first impression of the new control room that controls the electron storage ring Metrology Light Source, a particle accelerator whose radiation is used in industry and science.

The resonant name "BESSY II" has gained worldwide recognition over the past decade. Researchers from Germany and abroad, the Who's Who from business and politics, even the former chancellor – they have all been able to convince themselves of the potential applications of the electron storage ring in the JST control room at the Berlin Helmholtz Center. The MLS system of the neighboring Federal Institute is also controlled from the BESSY control center. A supplementary control station on the PTB site is used additionally, in the case of lengthy series of experiments, for example. Researchers and specialist groups benefit from the synergy effects of both facilities.

### **"It was simply a matter of tidying things up"**

As Operations Manager responsible for control center management, Ingo Müller is well aware of the

background: “The PTB is a close cooperation partner that enjoys a high status in our institution.” However, since the so-called MLS control station had more of a laboratory character, had grown historically and was correspondingly confusing, the desire for an upgrade arose. “It was simply a matter of tidying things up”, says Ingo Müller, who had already implemented the “BESSY control room” project together with Jungmann Systemtechnik. His summary: “That not only went well, it’s a huge success story – to this day!”

PTB control room before and after renovation

## **Two control center are connected with each other**

Against this background, the renewed cooperation with JST was obvious. “We didn’t want to establish a second system. The existing system had to be expanded, so to speak. The two control rooms should be able to communicate with each other; after all, they are connected. In addition, it was important to me to work with JST again because of the good experience,” explains Ingo Müller.

## **Geo redundancy and a "little spatial miracle"**

Whether space probes, detectors for industrial customers or metrological research – with the new monitoring center for the MLS facility, a separate, high-quality installation with geo-redundancy was created for the scientists of the Berlin institute. At the same time, “a little spatial miracle” could be realized here: Physicists monitor many thousands of parameters of the storage ring in just 18 square meters.

## **A whole control room world on 18 square meters**

In addition to the flexible KVM technology MultiConsoling® and intuitive operation via the myGUI® interface, the scientists also have a modern video wall and ergonomic control station consoles at their disposal. The innovative OPAL X11® acoustic ceiling sail is also part of the new equipment, as are integrated Qi charging zones in the console surfaces and an AI-supported air sensor that issues a warning message directly via the user interface if limit values are exceeded.

## **"With combined forces and know-how made possible"**

For Ingo Müller, one thing is certain: “The installation is a complete success and has been very well received. Everything is easy to operate, the ergonomics are right and the room has a good atmosphere.” Looking back, he assesses the individual development phases of the MLS installation: “The special achievement was essentially the preparation and planning to use a difficult room efficiently and optimally. In joint appointments on site, we made the whole thing possible with combined forces and know-how.”



**"The installation of the BESSY II control room more than a decade ago "has not only gone well, it's been a huge success story - until today!" This is exactly the story that is now being continued with the new MLS control room at the Physikalisch-Technische Bundesanstalt Berlin."**

**Ingo Müller**

Operations Manager for BESSY II and MLS, Helmholtz-Zentrum Berlin



**"The particular challenge was that the conditions were very difficult, as the room is extremely small with 18 just square meters. Nevertheless, a large number of systems are to be monitored there. This was only possible thanks**

to our customized solutions and detailed planning in advance, which was coordinated hand in hand."

**Dominik Zepp**

JST Consultant

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The components used in this project:



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



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



**myGUI**<sup>®</sup> user interface - in the intuitive 3D design of your control room for maximum user comfort



**Stratos X11**<sup>®</sup> control room desk – optional with height adjustment and proactive AlarmLight system

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

**OPAL X11**<sup>®</sup> – acoustic ceiling sail – for optimization of sound level and lighting

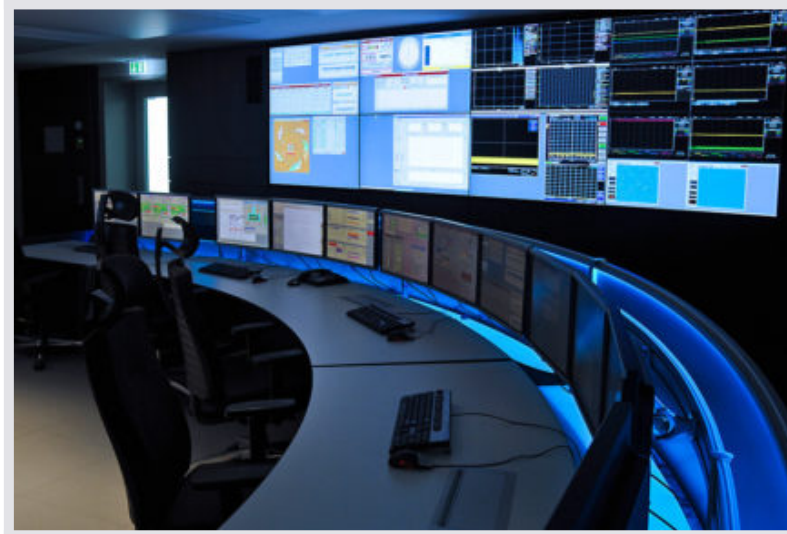
**JST CommandPad**<sup>®</sup> – efficient system control at the touch of a finger

**AlarmLight** – safe, visual alarm detection

**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



**Helmholtz-Zentrum Berlin**



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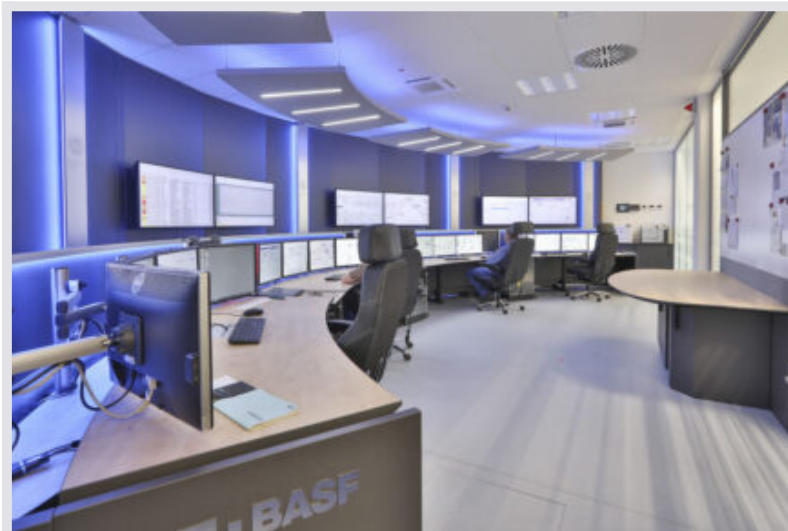
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