

Schön Klinik Vogtareuth relies on CuratOR Surgical Panels from EIZO

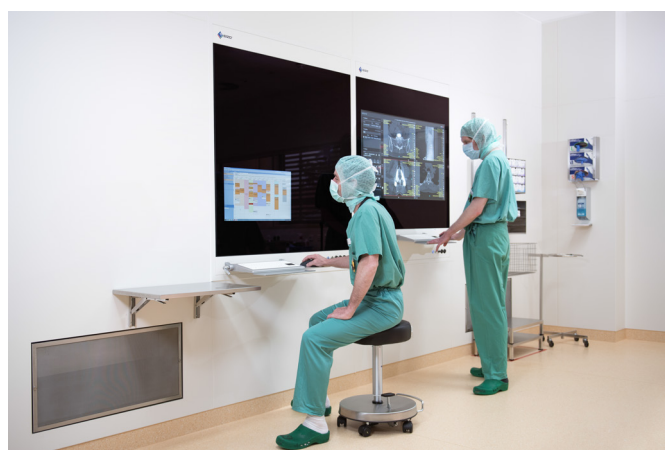
✕ **Easy, safe, and above all hygienic image reproduction in the OR**



The new OR facility at the Schön Klinik Vogtareuth, which opened in October, 2015, houses one of the most modern OR centers in Southern Germany. The hospital group invested some 50 million euros in the building in order to create an environment that would enable the best possible treatment for patients and efficient work for health care professionals. The image reproduction technology in the operating rooms is a critical component. To ensure a high-quality display of acquisitions and live images for the surgeons while simultaneously simplifying room preparation, the hospital installed specially adapted surgical panel display consoles from EIZO.

When planning the new OR center, which was tailored fully to the needs of employees and patient safety, the decision was made early in favor of monitors recessed into the wall, as OR manager Hubert Sewald explained: "From a hygienic viewpoint, a flat wall can be more safely and quickly disinfected and prepared than exterior structures or complex monitor arms. In addition, the risk of a collision with moving objects in the OR is significantly lower." As a result, each of the operating rooms was to have a 47" X-ray image viewer, on which images from the RIS, PACS, and HIS, as well as live acquisitions, can be displayed, and an HIS workstation with a display of at least 23 inches realized as a wall console. In addition, the base for a planned 19" control unit for video routing was to have already been set.

In addition to the hygienic aspects, such as a glass cover, impermeability, and surfaces resistant to disinfectants, and typical standard specifications, the invitation to tender for a corresponding technical solution also included functional requirements: The displays could not be reflective, had to provide DICOM-compliant representation, and had to be operated via a user-friendly keyboard. In addition, the system had to be easy to maintain and upgrade, and contain sufficient connectors for external devices such as scanners. And given the prescribed narrow installation space, it had to fit within a maximum possible housing depth of 15 cm.



✕ **"The monitor size and excellent image quality for example means the images on the workstation can be assessed and viewed from the operating table"**

*Dr. Manfred Kudernatsch -
chief of neurosurgery and epilepsy surgery*

✕ **Highest image quality for relaxed working**

To meet these requirements, EIZO, the monitor expert, produced a special model of its proven surgical panels tailored to the needs of Schön Klinik Vogtareuth. "The 47" large display in particular required millimeter precision so that we could fit within the designed space," said Matthias Lubkowitz, Vice President of the EIZO OR Solutions division. This position was set up as a practical standing location, while the HIS unit with a combination of 24" display and 19" touch screen for video integration was designed as a seated work station.



Both systems use special LCD monitors with 1920 x 1080 full HD, DICOM preset, and a 1000:1 contrast ratio. The luminance of the larger display is 700 cd/m², and 250 cd/m² for the smaller display. This makes it both easy on the eyes and possible to view even the smallest of details.

“The monitor size and excellent image quality for example means the images on the workstation can be assessed and viewed from the operating table,” said Dr. Manfred Kudernatsch, chief of neurosurgery and epilepsy surgery, in explaining the benefits of the new solution for practical work in the OR. The technology is also suited for use between surgeries: “A great deal of routine work can be completed either sitting at the small monitor or standing at the large monitor as needed, which is gentler to the spine.”

✕ Hygienic technology tailored to customer requirements

As installed, the monitors include a computer with 3.4 GHz i7 processor, 8 GB of RAM, and 250 GB SSD hard drive, in a coated steel housing that is water resistant and protected against dust penetration at all penetration points. Continuous, anti-reflective (on both sides) safety glass forms the front; its circumference is fully sealed to the wall and to the housing, ensuring easy disinfection. The front easily opens upward for maintenance activities or component replacement. PC and monitor cooling is passive. In contrast to conventional fans this provides very good hygienic properties as there is no exchange of air with the OR.

Both workstations include a keyboard that can fold up and down in multiple stages, and which incorporates a touchpad covered by antimicrobial silicone. Contaminants therefore have no point of contact and can be fully disinfected. “To enable the operator to type as comfortably as possible and to relieve strain on the joints, we designed and implemented a completely new palm rest at the customer’s request,” according to Lubkowitz.

The control was also equipped with a surface for a silicone mouse. An edge around the surface serves as a fall guard. At the customer’s request, a USB input was implemented directly next to the mouse port. Two additional USB inputs, an audio jack, the main switch, and a reset button for the entire system are implemented laterally offset from the mouse port. All inputs are splashproof and the switches are designed to the liquid tight.



✕ **“We can confirm that the system is highly reliable in all required areas”**

Hubert Sewald - OR manager

✕ Summary

The CuratOR Surgical Panels have now been in every day use at the Schön Klinik Vogtareuth for the past nine months. The medical staff quickly acclimatized, as Dr. Kudernatsch explained: “There were no problems changing to the new system.” And the colleagues responsible for hygienic preparation and for technology are also more than satisfied with the new image reproduction consoles: “We can confirm that the system is highly reliable in all required areas,” said OR manager Sewald.



✕ **More information:**

www.eizo-or.com

Background

Schön Klinik Vogtareuth is an internationally renowned facility with ten primary surgical specialty departments and 400 beds. The hospital specializes in treating children neurological and orthopedic diseases. Other specialties include neurology, neurosurgery with epilepsy surgery, orthopedics, spinal surgery, hand, elbow, and foot surgery, as well as cardiac and vascular surgery.

With 17 clinics in Bavaria, Schleswig-Holstein, Hamburg, and Hesse, Schön Klinik is one of the largest owner-operated hospital groups in Germany. Their almost 10,000 employees treat more than 100,000 patients per year.

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