

THE BRAINS BEHIND THE BUILDING EIN INTERVIEW MIT DIETER SCHNEIDER

Mr. Schneider, what specific measures has Kern + Schneider already implemented in SKYPER to address the technical requirements and challenges of such a high-rise building?

A central focus was ensuring that SKYPER would feature the most advanced room automation among all existing high-rise buildings in Frankfurt am Main. This sparked an odyssey through the technological landscapes of various manufacturers. Ultimately, we found partners who were highly motivated to work with us to develop tailored solutions that met Ampega's high functional and aesthetic standards. Examples include lighting fixtures that communicate with the room automation system, a room control device reminiscent of a pad from Cupertino, and a network that enables thousands of components to "talk" to each other. Of course, we always kept the tenants, operators, and Ampega in mind. The technology in SKYPER must always function reliably and be closely monitored, regardless of whether it involves old or new systems. The result is a hybrid technological environment that dynamically supports the gradual renovation of SKYPER, despite its high complexity.

How does the technology you have implemented in SKYPER contribute to improving the building's energy efficiency and sustainability?

In the past, each building system had its own communication cabling, running throughout the entire structure. Today, there is a single cabling system and a centralized network for all systems. For example, the automation ensures that office spaces are no longer fully ventilated after business hours, saving significant volumes of air from being heated, cooled, or transported. Motion sensors in rooms also optimize when the ideal temperature is set. The blinds control system further contributes to energy savings, though this depends on user behavior. In short, the new technology is capable of saving substantial energy.

Are there any specific innovative solutions Kern + Schneider has developed for SKYPER's users to enhance their comfort and productivity?

Innovation might be a big word here. At SKYPER, a team of dedicated professionals from various technical fields came together to develop a customized solution to replace outdated technology. The outcome was a specific and improved technical solution tailored to SKYPER, including the communicative lighting fixtures, the room control device as a user interface, and the comprehensive automation system with its complex programming. Additionally, numerous other adjustments have been made to improve the building's technology.

Considering SKYPER's unique architecture, what specific technical challenges did you face in implementing your solutions?

What seemed like a simple task proved challenging in the SKYPER Villa, as the historical building offers very limited options for cable routing. By contrast, the high-rise section is

much simpler in this regard. The many technical components that define SKYPER needed to be integrated with modern automation technology. For instance, operable windows must automatically limit or close based on wind speeds or fully close in case of rain. Blinds and windows must also respond to fire alarms by moving to their designated safety positions. Heating systems, cooling units, and ventilation devices, in conjunction with the new automation technology, ensure a comfortable climate throughout SKYPER. These components are distributed across 40 above-ground floors and 3 subterranean levels. To ensure safety, we installed a high-performance network that facilitates communication for video systems, access control, and hazard management across the entire building.

What personally motivates you to work in building automation technology, and is there a special moment in your career that holds particular significance for you?

Building automation connects all technical systems. Without it, a modern building cannot operate. It requires knowledge of all the technical systems in a building, whether HVAC, electrical, access control, video surveillance, safety, or IT systems. We interface with building owners, architects, technical planners, and, ultimately, the end users. Personally, I find building automation to be the most interesting and innovative technology in modern buildings. It has evolved into a discipline that combines process engineering, control technology, electrical engineering, automation, IT, and smart building solutions. This diversity makes building automation unique, and I look forward every day to discovering new ideas and tackling new challenges.

When I think about special moments, two come to mind immediately—one from years ago and one more recent. Shortly after Christopher Kern and I founded our office more than 20 years ago, we hosted a startup party with business friends and family. Amid the hustle and bustle, the most important part of my world was right there: my wife holding our two-month-old daughter and my four-year-old son by her side. Many can surely relate to that.

More recently, we established Ibekus GmbH. Here, we combine the experience of Kern + Schneider with the innovation and drive of our co-partner and managing director, Tim Elsenheimer. Together, we are shaping the future of building automation, and I am excited to continue this journey with our new Ibekus GmbH.