



**PROJECT AT A GLANCE**

Project Type:  
 Building Management System

Location:  
 Aalborg, Denmark

## Aalborg General Hospital

Denmark's Aalborg General Hospital in North Jutland started undergoing major renovations and new construction in 2002.

In cooperation with Aarhus University Hospital, Aalborg Hospital will provide a complete range of specialized health services to a population of almost two million people when the work ends in 2005, making it one of the country's biggest and most important medical centers. As a recognized provider of Building IT solutions for hospitals, TAC® was the natural choice for the project.

In addition to full modernization, Aalborg General Hospital expects to be promoted to the status of University Hospital in 2003, forging strong ties with Aarhus University in the process.

The hospital will become a center for medical students, researchers and conference delegates from around the world.

The county of North Jutland has promised approximately \$150 million in financial support over the next 15 years, so naturally the hospital and staff are eager to live up to the ambitions and expectations being placed upon them by such a large investment.

**THE CHALLENGE**

Hospitals are extremely sensitive environments and demand huge network solutions in order to perform optimally – every second of the day and night. As would be expected, patient comfort and healthy indoor climate are prime concerns. Aalborg General Hospital wanted a reliable Building Management System that was flexible enough to give each patient room customized indoor climate solutions for unsurpassable comfort. The system would control ventilation and all lighting in the 36,000 m<sup>2</sup> building complex.

**CUSTOMER BENEFITS**

- Flexibility in customizing climate in critical environments
- 24/7 reliability of system monitoring
- Seamless integration with third-party systems
- Forecasted energy savings
- Expandable system for future growth

## Aalborg General Hospital



### THE SOLUTION

TAC provided an advanced intelligent LONWORKS® solution that offered secure integration capabilities with all third-party systems—a vital factor when lives

are at stake. The system permits heating and ventilation to be individually controlled in all patient rooms. Lighting in public areas such as corridors is controlled by motion detectors and lux sensors, which help to keep electricity costs to a minimum. Sophisticated CO<sub>2</sub> sensors monitor heat and ventilation levels automatically in staff and conference rooms. The LONWORKS®-based network TAC installed has almost 1,200 nodes and over 8,000 I/O points to safeguard the hospital's future system infrastructure needs.

### THE BOTTOM LINE

TAC was chosen as sole supplier because it understood the hospital's critical environment and expansion needs. Aalborg General Hospital is secure in knowing it can now provide a safe and comfortable environment for patients and staff while enacting energy conservation measures.

## HEALTHCARE PROFILE

Healthcare facilities operate 24/7 and require 24/7 system reliability and precision. Environmental conditions must adjust quickly and uniformly to the needs of each patient. Particular areas, such as surgery suites and laboratories, must maintain specific temperature, air filtration and ventilation requirements.

Managing energy usage without compromising life critical environmental needs is a huge challenge faced by maintenance and engineering personnel. For both patients and staff, TAC's open systems solutions mean a total quality healthcare environment and efficient facility operation.

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