Building Automation


# F-EINS meat center

## Facility masterpiece in record time

### Over 12,000 square meters of production capacity

It's no small feat to supply a city of over one million with much of its beef, pork, ham, sausages, poultry and fish - especially with today's stringent freshness requirements. The Viennese consume about 300,000 kg of meat daily and supplying that need involves speed and refrigeration at a constant temperature. The f-eins meat center in Vienna-Inzersdorf opened in December 2007 to process and distribute beef and pork products, chicken and fish to the groceries and gourmet markets of the Austrian capital. It was built to meet today's health standards as well as future enhancements. The 12,431 square meters building was constructed in only 14 months for € 21 million and f-eins employs about 200 people.

"Since December 2007, much of Vienna's fresh meat supply has been coming from a new processing center, f-eins, which was built to the highest safety and hygienic standards. This facility boasts comprehensive and complex energy and cooling technology as well as state-of-the-art safety and security. The center's electrical engineering equipment was planned, installed and made operational in just under a year, thanks in part to a design firm's migration to EPLAN Electric P8."

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FRIEDHELM LOH GROUP

# USING
## the extensive database functions of EPLAN Electric P8

"A big part of the challenge was the tight timeframe," says Theodor Christomannos. "Even though the order was placed at the end of 2006, final authorization to proceed with installation only came in mid-August 2007 and there was no question of delaying the opening date of 7 December 2007."

Meat carving is largely done manually. This requires appropriate hygiene facilities with disinfection sluices to separate clean and unclean areas, cleaning stations and sensitive surface materials as well as a constant processing temperature of 12° C, regardless of the outside temperature. The center's own refrigeration equipment provides cool air, while heat is supplied by a district heating network. A transformer station inside the complex is the hub of electrical supply, with full power backup capability for all systems. Safety and security features include access control for 100 secure doors and full area CCTV monitoring.

### Firm deadline challenged electrical engineering group

All of this demanded a great deal of electrical engineering expertise, especially for planning the master control system. The job was awarded to Ing. Emmerich Csernohorszky GmbH, one of Austria's largest owner-managed electrical engineering companies with 300 employees. Theodor Christomannos heads up the 15-person automation technology department which plans and develops installations for industrial and building automation.

### Quality shortened the implementation phase

The overall responsibility for electrical planning for the installation, which included 200 meters to automatically calculate billable utility costs for renters, was given to a partner, Ing. Anton Öllerer, an Austrian EDP & IT consulting company. "It was only through the very high quality of their plans that it was possible to shorten the implementation phase enough to be ready by opening day," says Christomannos. All the electrical engineering, from power distribution and monitoring of the inside temperature to heat recovery systems and peak load management, was designed exclusively using EPLAN Electric P8 even though at the beginning of 2007 this electrical engineering design package, EPLAN's flagship product, was brand new and had little experience with actual customers. "We chose to go with it because we wanted to use the extensive EPLAN Electric P8 database functions and employ the design system to generate all the automation up to PLC configuration," says Anton Öllerer.

# GETTING
## the complete cable list
## at almost the same time

### 3,200 project pages in one document

"Plus, EPLAN Electric P8 lets you create an entire project logically within a single file, with all controls, references and cross-references," adds Theodor Christomannos. That's quite a feat for a project that involved as many as 120 enclosures. "The customer doesn't have to know in detail about each part of the system when error messages are received." For example, when a forced-air cooler fails, the fault code delivered with the message can be entered directly in the file search function in the EPLAN PDF documentation and a technician can immediately see where the faulty component is physically located, the path of its electrical feed, UPS supply and data network feed and where the associated inputs and outputs for automation are located. This is only possible because EPLAN Electric P8 collects the almost 3,200 pages of f-eins' documentation in a single, integrated, searchable document.

The previous EPLAN version could also do this, but the database-driven structure of EPLAN Electric P8 has made handling much easier. "In EPLAN Electric P8, it is a sheer pleasure to be shown the connections directly and to get the complete cable list at almost the same time – this greatly simplifies mounting," says Theodor Christomannos. "Integrated engineering makes it easier to keep track of large projects and prevents loss of knowledge that can occur with staff turnover."

### Productivity boost of 30-40% by EPLAN

The implementation phase of the complex electrical engineering facilities at f-eins and its 4,500 data points involved coordinating 15 companies on site, with last minute changes coming in right to the end.

> "The engineering effort increases more than proportionally to the size of the project," says Theodor Christomannos. "By migrating to EPLAN Electric P8, the amount of work was reduced by 30 to 40% and do-overs were almost completely eliminated. The investment in EPLAN paid for itself after just this one project."

Building
Automation

ePLAN® electric P8

# Turning to EPLAN
## when speed is of the essence
# SUMMARY

The ability of EPLAN software to accelerate project turnaround time proved critical to the successful design and installation of electrical systems at the new f-eins processing center handling much of Vienna's fresh meat, fish and poultry preparation and distribution. All electrical design and installation work was completed in just under a year. Working in EPLAN Electric P8 reduced the amount of work required for a project of this magnitude and complexity by 30 to 40% and was essential for enabling the project to meet a very aggressive completion timetable.

Find out more about Ing. Emmerich Csernohorszky GmbH on www.cserno.at.

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