

Manufacturing

ePLAN[®]
electric8



ELECTROTEL S.A.

supporting
business expansion

E-CAE benefits readily scalable

A great strength of database-driven electrical CAE (E-CAE) programs like EPLAN is that their many benefits are readily scalable for a company like Romania's Electrotel S.A. in the midst of growing its business aggressively. No adjustments are needed to handle an expanding order volume or product portfolio, but growth should be an incentive to make maximum use of EPLAN's considerable functionality. Electrotel is a mid-sized Romanian manufacturer that specializes in low and medium-voltage switchgears and automation control panels. Between 2007 and 2010, despite the global recession, it tripled annual sales to € 17 million, with over 70% of its production volume exported throughout the world.

efficient engineering.

FRIEDHELM LOH GROUP

“There are now situations where two engineers can collaborate on a project, in real time, and EPLAN made that possible. That means those projects can be completed in less time.”

INCREASED Collaboration with EPLAN

Electrotel set three main objectives in adopting EPLAN: Perform all electrical drawing digitally; standardize the format and structure of all projects, and reduce design time by 30%. All three goals have been accomplished.

Upgrades from AutoCAD to E-CAD

Founded in 1970 and based in Alexandria, Electrotel produces a portfolio of its own products for use in industries such as nuclear power, mining, rail transportation, oil and gas extraction and refining. It also manufactures a full range of TTA (Type Tested Assembly) distribution systems for major OEM suppliers. It counts some of the biggest names in European industry as key customers: Siemens, Moeller, ABB, Alstom, Schneider Electric, Gazprom and Lafarge.

Almost one in six of Electrotel's 360 employees are engineers, 22 of them electrical engineers. As its turnover began to rise strongly, the company realized the limitations imposed by its AutoCAD and Proplan design software in terms of stability, accuracy, project turnaround time and design workflows were becoming an impediment. Projects, including modifications, took much longer than they would have using a database-driven E-CAE package. Among E-CAE candidates, EPLAN Electric P8 offered many enhancements that appealed to Electrotel management, not only for improving productivity but also for the ability to share files with other departments and access vendor catalogues directly to help standardize and streamline purchasing.

Recommended two-phase approach

What was noteworthy about Electrotel's approach to upgrading from a simple CAD to an advanced E-CAE was the implementation strategy. In such a major switch, not all of the opportunities for improving productivity are obvious at the outset, and engineers starting to use a database-centered E-CAE first. EPLAN Romania proposed a two-phase approach to implementation. EPLAN would train Electrotel's electrical engineers to use the program and provide regular support on project-related issues, work flows and network capabilities. After the engineers had a year working in the new environment, EPLAN would return on a consulting basis to conduct an in-depth evaluation of the engineers' knowledge of the program and how to optimize work flows through additional automation measures and standardization of recurrent data and design processes.

Made early progress

Much of what Electrotel was able to achieve in the first phase was typical of the experiences of many other first-time EPLAN customers. Significant efficiencies were realized, both from automating processes and structuring work differently. For example, for the first time engineers at different work stations could work on the same project simultaneously, sharing data.



Phasing in Added

PRODUCTIVITY

Facilitated collaborative design

"There are situations where two engineers can collaborate on a project in real time, and EPLAN made that possible," says Laurentiu Catalin Codrea, director, research and development for Electrotel. "That means those projects can be completed in less time." Archives of standard components and commonly used project macros were started in the EPLAN database and are being added to continuously.

Engineers are turning around orders faster, producing better-structured and more accurate data. With EPLAN's automatic error-checking and report-generating features, they spend much less time proof-reading project documentation. There is closer collaboration between the engineering and production departments. "Our people especially like the accuracy and ease of drawing in EPLAN," says Codrea. "Modifications are easier to apply, with important time savings." Some activities were accelerated by enabling direct data transfer. EPLAN installed a software interface so engineers working in Electric P8 could configure terminal rows and send output files directly to Phoenix Contact and Weidmuller plotters.

Upgrading to EPLAN 2.0

For the second stage review in 2010, EPLAN conducted a thorough analysis of how design work was being performed to identify additional efficiencies. Its recommendations covered such topics as advanced configuration of project and reports templates, and configuring specific project and user settings as per company standards. It also dealt with establishing editing rules for the component database, central editing of device properties using navigators and table editing, connection definitions and numbering, logical project checking and revisions management, and advanced handling of PLCs. As these and other recommendations are fully implemented, Electrotel can expect further reductions in design time beyond the 30% already achieved.

"The service and support provided by EPLAN Romania is really professional and oriented to the specific needs of the user."

Leveraging EPLAN for growth
Electrotel S.A.

SUMMARY

Romania's Electrotel needed an advanced, database-driven E-CAE program to support its rapidly expanding sales of low and medium voltage switchgear and other electrical components for heavy industry. Based on a recommendation from EPLAN Romania, it adopted a phased approach to implementing EPLAN Electric P8. First, EPLAN trained the company's electrical engineering staff in the new software. Then, after a year of letting them get comfortable with it, EPLAN performed an evaluation of how it was being used and made specific recommendations to optimize work flows by customizing processes and standardizing content and settings to get the most out of the program's extensive automation and data storage capabilities.

Find out more about Electrotel S.A. at <http://www.electrotel.ro>

efficient engineering.



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