

» Application Story «

Industrial Automation



RTSoft Creates Automated Pump-and-Compressor Equipment Preventive Maintenance Control System for PO Kirishynefteorgsintez llc

Today, intense competition amidst oil refineries and petroleum chemical plants forces plants and companies to find new ways of profit maximization and production costs minimization at a specified product quality. A successful solution of production performance optimization tasks is not possible without structurization of large volumes of information about current condition of technological equipment and maintenance level at the enterprise.

The contract between RTSoft CJSC and PO Kirishynefteorgsintez llc, the biggest oil-refining enterprise of North West region of Russia, was concluded exactly to create and deploy a comprehensive production assets control system named „Automated Pump-and-Compressor Equipment Preventive Maintenance Control System“. The system, which was developed on the base of Avantis.Pro, was put into commercial operation in the beginning of 2005. Engineers of RTSoft carried out a full-scaled survey before they started to develop the project, in course of which they:

- » Analyzed existing data processing systems at the enterprise;
- » Defined existing interaction between departments in course of planning and organizing repairs of pump-and-compressor equipment (PCE) more exactly;
- » Defined algorithms of possible interaction between existing systems and Avantis.Pro;
- » Analyzed existing instrumentation for PCE status registration, including network infrastructure;
- » Learned a technology of interaction between enterprise's departments, which are involved in the repair works preparation and execution processes.gubergren, no sea takimata sanctus est Lorem ipsum dolor sit amet.

A hierarchical enterprise technological object model was built based on the survey results, which integrated characteristics and ratings of all PCE pool of the enterprise. Dynamic characteristics of PCE, stored in the system, help to track the current equipment status. Features of the Avantis.Pro's SKLAD module allow to do the full-fledged stocktaking of stored materials, as well as to automate parts order and issue. Implementation of electronic approval of documents used in repair works execution resulted in substantial reduction in temporal expenditures of repair and technological personnel. Developed and realized report forms help generate various analytical information on-the-fly. Duplication of the functions of plant's program systems was eliminated thanks to developed synchronization mechanisms built in the automated pump-and-compressor equipment preventive maintenance control system. System users gained individually adjusted working stations, which can be upgraded during their operation. Implementation of the automated pump-and-compressor equipment preventive maintenance control system at the PO Kirishynefteorgsintez llc provided migration from a periodical preventive maintenance system to "repairs by status", the most resulting way to improve productivity of an enterprise.



About Kontron

Kontron is a global leader in embedded computing technology. With more than 40% of its employees in research and development, Kontron creates many of the standards that drive the world's embedded computing platforms. Kontron's product longevity, local engineering and support, and value-added services, helps create a sustainable and viable embedded solution for OEMs and system integrators.

Kontron works closely with its customers on their embedded application-ready platforms and custom solutions, enabling them to focus on their core competencies. The result is an accelerated time-to-market, reduced total-cost-of-ownership and an improved overall application with leading-edge, highly-reliable embedded technology.

Kontron is listed on the German TecDAX stock exchanges under the symbol "KBC". For more information, please visit: www.kontron.com

CORPORATE OFFICES

Europe, Middle East & Africa

Lise-Meitner-Str. 3-5
86156 Augsburg
Germany
Tel.: +49 (0) 821 4086-0
Fax: +49 (0) 821 4086 111
sales@kontron.com

North America

14118 Stowe Drive
Poway, CA 92064-7147
USA
Tel.: +1 888 294 4558
Fax: +1 858 677 0898
info@us.kontron.com

Asia Pacific

17 Building,Block #1, ABP.
188 Southern West 4th Ring Road
Beijing 100070, P.R.China
Tel.: +86 10 63751188
Fax: +86 10 83682438
info@kontron.cn