

# ➤ Kontron Solutions@Work

We create digital brains for a more intelligent world

## ➤ 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.



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 AG is a worldwide leading manufacturer of embedded computer technology and robust solutions for mobile use. It supplies leading OEMs, system integrators, and application providers in a wide variety of market segments such as data and telecommunications, automation, measurement and control technology, traffic engineering, medical and military technology, as well as aviation and energy. Kontron's goal is to enable customers to significantly reduce their time to market and to create clear competitive advantages through products such as high-performance open computer platforms and systems, single board computers, HMIs, and mobile computers. Kontron employs over 1,900 people worldwide with production facilities in Europe, North America, and the Asia-Pacific region. The company is listed on the German TecDAX 30 with the company symbol "KBC". Kontron is the only company based in Europe which has premier status in the Intel® Communications Alliance and, thus, has early access to leading Intel technologies and preferred engineering support. For more information about Kontron, visit the company's website: [www.kontron.de](http://www.kontron.de).

## ► Corporate Offices

### Europe, Middle East & Africa

Kontron AG  
Oskar-von-Miller-Strasse 1  
85386 Eching/Munich Germany

Tel.: +49 (0)8165/ 77-777  
Fax: +49 (0)8165/ 77-279

[sales@kontron.com](mailto:sales@kontron.com)

### North America

Kontron America Corporate Office  
14118 Stowe Dr  
Poway, CA 92064-7147

Tel.: +1 (888) 294-4558  
Fax: +1 (858) 677-0898

[sales@us.kontron.com](mailto:sales@us.kontron.com)

### Asia Pacific

Kontron Asia Inc.  
4F, No. 415, Ti-Ding Blvd.,  
Sec. 2, NeiHu District  
Taipei, Taiwan 114  
Tel: +886 2 2782 0201  
Fax: +886 2 2782 7486

[sales@kontron.com.tw](mailto:sales@kontron.com.tw)

### RTSoft

Exclusive Partner for Kontron  
P.O. Box 158, Nikitinskaya, 3  
105077 Moscow  
Russian Federation  
Tel: +7 095 7426828  
Fax: +7 095 7426829

[sales@rtsoft.msk](mailto:sales@rtsoft.msk)

#5W-Kinshymetzergsintez LCF15032006-PDL  
All data is for information purposes only and not guaranteed for legal purposes. Information in this datasheet has been carefully checked and is believed to be accurate; however, no responsibility is assumed for inaccuracies. All brand or product names are trademarks or registered trademarks of their respective owners.

If it's Embedded, it's Kontron.



**kontron**