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**USING OF ANALYSIS APPROACHES FOR NOT MEASURABLE  
PARAMETERS AT THE LEVEL OF DISTRIBUTED CONTROL  
FOR AUTOMATED SYSTEM OF OBJECTS AND FOOD INDUSTRIAL COMPLEXES**

Modern development of automation tools (hardware and software) allows to implement complex set of control algorithms, which may include: data processing algorithms of technological process, algorithms for the identification of situations of technological process and its equipment, algorithms for adaptation to changes of object parameters and external disturbing influences, all this allows to keep the values of technological parameters near their default values limits, that allows the most efficient use of resources and materials in production. The efficiency of the system work as a whole depends on the efficient functioning of the subsystems of each level, that is why we should approach to the analysis and designing of the system not in terms of hierarchy, but as a single mechanism in which every detail is important. For example automated process control system (APCS), which is a operator process control system in the form of automated workstation, where there are the tools for collecting, processing and the archiving of information about course of the process, and it consists of typical elements of automation: sensors, control units, executive devices. Also, components of the APCS is automatic control systems, SCADA (Supervisory Control And Data Acquisition), DCS (Distributed Control Systems), and currently becoming more common a new control technology- APC (Advanced Process Control). That is despite the large number and diversity of approaches in the development of control systems and their modules are important issues on the one hand, how to take into account all elements of control system which affecting its work, on the other, how to move to total evaluation of the system work for understanding its development and the strategic issues in the management. In this work some approaches implemented for distributed process control level are presented. The coverage of these approaches is necessary for better understanding of the processes that occur during formation of control action, especially for the cases where industrial software developers for industrial ACS leave for setting blocks of parameters, that justified when dealing qualified specialists with significant work experience, but knowledge of internal processes will provide more flexible work.

**KEY WORDS:** *control system, SCADA, DCS, APC*