

## DESCRIPTION OF THE QGUAR SYSTEM IMPLEMENTATION

### Place of implementation:

Tychy, ul. Strefowa 4  
Kęty, ul. Kościuszki 111

### Implemented system:

Qguar APS, Qguar MES, zenon SCADA

**Cooperation commencement date:**  
2016



## Company profile

The Alupol Packaging Group that belongs to the Kęty S. A. Capital Group is the biggest manufacturer of flexible packaging units in Poland and one of the biggest in Europe. The Alupol Group comprises Alupol Packaging S.A. located in Tychy and the following dependent companies: Alupol Packaging Kęty Sp. z o.o. and Alupol Films Sp. z o.o.

The company cooperates with the biggest international concerns, as well as with big enterprises that operate on the local market in pharmaceutical and chemical industries and in the following food industry branches: food concentrates, confectionary goods, edible fats and oils, milk products and meat products.

## Business line characteristics/challenges

In its business activities, Alupol faces challenges that are typical for big production enterprises. These include, among others, effective planning of work of a large number of machines, systematic online production tracing and reacting to events within a production floor, effective management of huge numbers of orders and operations. A wide assortment of manufactured goods and high intensity of production (3 work shifts) require the company to find an efficient, automated method of production planning, reporting and control.

One of important features of Alupol Packaging follows from the fact that the company operates many plants. Some orders are realized in more than one production plant, which requires central management and coordination of tasks. Moreover, central production planning and management allows the enterprise to improve its overall performance.

## Selected solution

In order to improve its capabilities in the domain of efficient planning of and control over the process of production, Alupol Packaging decided to choose the following software packages: Qguar APS, Qguar MES and zenon SCADA.

The Qguar APS system allows any activities related to order realization to be scheduled automatically. A production plan is worked out in compliance with priorities and guidelines specified by a planner. The system allows for actual and current production capabilities of a plant, which can be limited, for instance, due to reduced availability of raw materials or the need to carry out overhauls or servicing of machines.

The Qguar MES system is used to monitor and manage production tasks in real time. The collected data that are presented to the user add up to a coherent and comprehensive overview of the production process. With this system, information can be quickly exchanged between production staff and the planning, technological, quality control and maintenance departments.

The zenon SCADA system supports direct data acquisition from production machines and allows one to get access to the work parameters uploaded from the machines.

Communication between Qguar APS and Qguar MES allows planners to delegate tasks directly to work posts and production staff to systematically notify online about events and the progress in order realization. Moreover, the Qguar APS and Qguar MES systems have been integrated with the production and warehousing modules of the ERP Infor LN (Baan) system.

## Benefits

Thanks to the implementation of selected IT systems, Alupol accelerated and refined the process of production planning and enhanced its control over the production process itself. The Qguar MES software automated production reporting, which considerably shortened the time required to prepare schedules, balance sheets and analyses, as well as reduced the risk of errors in the data. Fast and reliable information about production progress allows one to make management decisions online, as need arises. The information about work efficiency, down times and machine failures – collected, archived and made available online by the MES system – allow the company to establish realistic and feasible production norms, and thus to determine order realization terms with higher accuracy. The MES system also provides the possibility of precise recording of remedial actions undertaken by production maintenance teams in connection with machine failures and defects. The comprehensive genealogy of products created by means of the MES system facilitates the procedure of potential complaint support in the company. The transparency of data related to consumption of raw materials and location of half-products – ensured by the MES system – significantly enhanced the performance of internal logistics tasks in the enterprise. Accurate data related to consumption of raw materials and duration of operations allowed the company to acquire even greater control over the production process itself and its costs.

