Pepsi Hungary uses an SPC system based on STATISTICA Enterprise

As a result of the successful implementation of STATISTICA Enterprise quality monitoring and control systems at the Polish and Czech Pepsi plants, Pepsi Hungary has also started using a new SPC system based on STATISTICA Enterprise, customized according to local specific requirements. Hungarian Pepsi BU is wholly owned by PepsiCo after the merger of PAS & PBG & PepsiCo. Pepsi Hungary produces various brands of carbonated beverages like Pepsi, 7Up, and Mirinda.

Requirements
Mr. József Sinkó, quality assurance & regulatory manager at Pepsi Hungary said “We have chosen StatSoft’s solution for the effective assurance of the strict quality requirements of the production processes. The main requirements were that the SPC system should help us in monitoring and controlling product quality parameters, recognizing relationships and trends in time, and identifying sources of errors. Pepsi is also monitoring the machine capability and looking for to eliminate waste to ensure sustainability and decrease carbon footprint of the plant. Before introducing the new SPC system, it was a complicated and time-consuming task to perform analyses for longer periods of time or more parameters, because our old SPC system did not have the appropriate tools to find the necessary data easily and quickly. I can say that StatSoft’s user friendly software makes our life much easier.”

Results
A number of quality parameters are measured during production including, the sugar concentration, carbon dioxide concentration, acidity and volume of the product, as well as the tightness of bottle caps. These are all monitored and controlled in the new SPC system. The quality parameters are calculated using different specifications for the different products.

Unlike the STATISTICA Enterprise solutions at the Polish and Czech Pepsi plants, where StatSoft developed a data collection system, the STATISTICA Enterprise SPC system implemented at Pepsi Hungary is connected to a third party data collection system that has been used at Pepsi Hungary for many years. The customized SPC system performs the statistical analyses and creates the analysis reports corresponding to the special user requirements, starting from data taken from the SQL database of the third party data collection system of Pepsi Hungary.

Mr. József Sinkó, quality assurance & regulatory manager pointed out: “We have had good experiences with the STATISTICA Enterprise SPC system since it was introduced in January, 2010. We are satisfied both with the support StatSoft provided to us during the planning stage, and the implemented system itself. The system meets our requirements in providing us with up-to-date, detailed reports that make quality assurance more effective. Using the new STATISTICA Enterprise SPC system the process capability indices can easily be calculated for a given day, week or any other selected period of time that provides us with a quick and detailed overview on the quality of production. Based on the quality results obtained for individual production lines and products, it is easy to decide where we should take remedial action. Using the science of SPC gives us the possibility to increase product quality and process capability, while the financial figures also improve.”

Summary
The main purpose of the new STATISTICA Enterprise SPC system is to support the daily decisions of the quality managers. The system:

- provides customized reports to obtain a general survey of the quality of production, and to identify problems and areas where development is required,
- provides flexible access to historical production data,
- allows for exhaustive individual analyses of data using a set of comprehensive analysis tools.

Future plans
A planned next step of applying the STATISTICA Enterprise SPC system is to provide management with an automated daily report summarizing the quality results of Pepsi plant, and to increase the number of the SPC controlled data supporting sustainable growth of the company.