Standardization-based Automatic Engineering for reduced integration costs

Generation of Line Management Systems in the Food & Beverage industry

CHALLENGE

The Line Management Systems (LMS) in F&B plants are implementing various functionalities, from production supervision, alarm and event management, right up to calculation of Key Performance Indicators and Reporting. The connection to different machines and the need for different functional modules is making the integration of these systems complex and expensive.

SOLUTION

In order to reduce time and to simplify the engineering process of a LMS, the application is designed in a modular way. The core principle of the solution is the standardization of these modules and of their characteristics: the communication with the machinery – based on Weihenstephan Standards, the information flow for data processing and the way to present the information to end-users.

The Automatic Engineering technology of the software zenon enables the creation of a Wizard application which simultaneously uses the mentioned standardization and allows user configuration and adaption to concrete production equipment. The Wizard generates functional Line Management Systems automatically. If required, the result can be further tuned, by using the zenon Development Environment.

BENEFIT

▸ Dramatic decrease of engineering times for every single application
▸ Marked reduction of error sources
▸ Reduction of integration costs
▸ High Return on Investment (ROI)
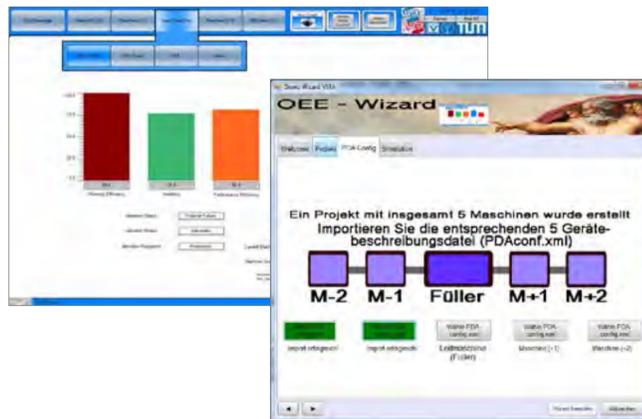
The zenon Wizard generates a ready-to-use Line Management System.

PROJECT OVERVIEW

INSTITUTION
Technische Universität München, Center of Life and Food Sciences Weihenstephan

TYPE OF PROJECT
Master Diploma Thesis
Period: 2012 (ca. 9 months)
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