Successful Kick-off for Demonstration Platform

MAGDEBURG, late January (bv).

Around 60 participants, mainly managing directors and project managers, from companies all over Germany travelled to the Virtual Development and Training Centre (VDTC) at the Fraunhofer Institute for Factory Operation and Automation (IFF) to attend a workshop headed “Effective Order Processing in Plant Engineering”. The essence of this event was how cutting-edge engineering methods can be utilized to improve competitiveness — and these days especially, competitiveness means increased cost transparency in project management.

The Institute Director, Professor Michael Schenk, played host to the event and welcomed the participants. Professor Günter Wozny from the Institute of Process and Plant Engineering at Berlin University of Technology spoke on trends in plant engineering. In his lecture, he focussed on the modularization and reuse of plant components in engineering. Wozny illustrated his theories with reference to the example of a pump assembly. He discussed the same pump type with different groups of fittings and the associated pipework, in one case fitted at the top and then at the side.

Martin Petzoldt from Choren Industries spoke on the topic of workflow management and software support. Thomas Schulze, Head of Virtual Development, Engineering and Training Centre (VDTC), at the Fraunhofer IFF, presented the idea and concept behind the demonstration platform and detailed the business model on which it is based. The demonstration platform was initiated to provide plant engineering companies with professional support in project management, enabling them to systematically monitor and control projects from start to finish. Following analysis, project workflows can be mapped with the software available in the demonstration platform, which consists of the engineering planning tool Cadison from ITandFactory GmbH (Bad Soden) and the ERP system for process and plant engineering PDV-A from B.I.M. Consulting mbH (Magdeburg). With the help of this platform, companies can pinpoint potential for rationalization and are alerted to possibilities for improving organization processes with the support of the relevant software. At the same time, the platform can be used for testing the advantages of processes and software within the framework of the company-specific project organization.

Rolf Paul, Managing Director at B.I.M. Consulting, gave an insight into the idea behind the demonstration platform: “Strictly speaking, every plant engineering company manufactures one-offs, but there are nevertheless procedures and technologies that can make the company’s work easier, for example by providing more cost transparency.” He added “It is important to bring together the two aspects, workflow organization and support software.” The demonstration platform can be used to run through appropriate scenarios for companies. This was shown in a live demo of a case study during the event. In a chat with our editors, Heiko Teichmann from Borsig Boiler Systems, a successful company in boiler and power plant engineering, described his impressions of the event as a guest. Teichmann rates that shown in the demo “Project Workflow Management in the Field” as relevant. Admittedly, as Teichmann saw it, a very complex application was demonstrated, quasi as a final configuration. He recommended, “Certain configurations should be demonstrated, as this would make it easier to access the issues involved.” Of course, he realized that the example shown was intended to cover a wide spectrum of applications, so that it would seem relevant to everyone in the auditorium: not just machine engineers, but also the manufacturers of other plant engineering components or the suppliers of electronic instrumentation and control systems. Teich-
mann’s verdict: “I think the scenario presented was generally practicable.” Teichmann certainly regards it as interesting to use a powerful interface to combine a tool that can be used to map certain business processes (PDV-A), though not necessarily going into actual accounting, but at least those processes important for controlling in the scope of ongoing costing, with a plant engineering tool (Cadison). This, he believed, could help to reuse data from a costing performed prior to the order being awarded throughout the project and; “That ultimately helps to draw up other tenders faster.”

Borsig Boiler Systems uses a 3D-MCAD-System with CAD-near data management for planning its plants, but it does not yet use a single-source tool for project management with which all project-related data, P&IDs, lists or power plant numbers can be managed in one project database, from which 3D models can be referenced. This is precisely what Cadison and PDV-A do.

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It was also worth jotting down the information presented from a purely business point of view as not inconsiderable funding is available for this type of support. Depending on their location and qualifications, small- to medium-size plant engineering enterprises can apply to the German or state governments to pay at least a part of the costs for demand analysis and implementation. In Saxony-Anhalt, this can cover 75 percent of the total costs. For example, for an analysis and small-scale test project, if 20 day rates at 1 000 euro are to be charged, this would then cost the company just 4 000 or 6 000 euro.

Talking to our editors, Thomas Schulze from Fraunhofer IFF emphasized that the consultation services offered by VIDET centring round the demonstration platform also included drawing up recommendations for virtual engineering in general for SMEs. For this too, Schulze explained, was it possible to apply for funding. “Plant engineers can therefore test out modern engineering methods and match them to their individual needs without taking on any financial risk.” Schulze sees his role as that of a bridge-builder.

www.bim-consulting.de/demonstratorplattform.html
www.cadison.com
www.iff.fraunhofer.de