



Small machinery, powerful instrument – Detact at work

## KEEPING TRACK

### CROSS SECTION

#### Smart software system for efficient Technology Data Management (TDM)

**Located in Dresden, Saxony, the Symate GmbH develops and commercializes the browser-based software-platform Detact® for the integrated management of technology data. Detact is made for the special requirements of engineers in research institutes and manufacturing companies who want to digitalize, analyze and visualize complex technical processes to create process transparency and to expand their engineering knowledge.**

The software uses data produced permanently in test series and/or manufacturing processes, for instance in machines, electronic controls or various databases. The potential of this knowledge resource has been little used to date because of the difficulties in handling and synchronizing such big amounts of data manually. With its high level of automation, online-capability and data integration, Detact reduces the effort to understand and to develop complex technologies – the engineer gets the right information at the right time at the touch of a button.

#### Gladly outsourced

Especially in the field of lightweight construction engineers are faced with the challenge to manage the complexity of developing new materials, like fiber-reinforced composites, or innovative manufacturing processes. For example, an essential part of their work is the experimental investigation of material characteristics. With the complexity of materials increases the analysis and test effort, as well as the amount of data. Up to 30 percent of the total effort

is caused by data handling activities; e.g. to bring together experimental data from different testing machines and software systems. By automating data collection, integration and analysis, the software Detact significantly reduces non-productive data management activities. Thus, engineers can work more focused and efficient.

#### Practical examples

The Leichtbau Zentrum Sachsen GmbH (LZS) has successfully applied Detact since 2014. The director of LZS, Dr. Ulf Martin, emphasizes: “For us, Detact is an important tool to optimize our internal research and development processes. Furthermore, through the use of the software we are building up specialized knowledge of the collection and analysis of system parameters. It is intended to make this expertise available for our customers and development partners, as an addition to our services for the users of fiber-reinforced composite technologies.”

Yet the development project between Carbon Concrete Composite (C<sup>3</sup>) and Symate

shows, that data management is not confined to one single company alone. C<sup>3</sup> is the largest national research project in civil engineering in Germany and pushes forward the practical application of carbon concrete. Over 140 project partners from science, economy and associations at different locations must be organized efficiently. Symate networks the C<sup>3</sup> project partner with Detact, thus making the knowledge transfer much easier. Development processes are accelerated and traceable by achieving online-access to experimental data across different institutes and locations, e.g. to prevent duplication of testing.

Summarizing these two example projects, Detact creates the prerequisites for mastering the increasing complexity of modern manufacturing technologies through a particularly highly automated data utilization.

Further information:

**Dr. Martin Juhrisch**,  
CEO, Symate GmbH, Dresden,  
phone +49 (0) 351 / 463-336 15,  
martin.juhrisch@symate.de,  
www.symate.de