

# Press release

September 2022

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### **Bauma Innovation Award 2022**

Construction category
BAUER Spezialtiefbau GmbH / fielddata.io GmbH / abaut GmbH

## <u>Process tracking system b.navigate nominated for Bauma</u> <u>Innovation Award 2022</u>

**Schrobenhausen / Munich** – Digitalization in specialist foundation engineering at Bauer has steadily advanced over the last few years. Innovative approaches and ideas – such as the b-project data management software – have increasingly digitalized and automated the collection, processing, and analysis of all relevant data generated during the execution of a specialist foundation engineering project. This encompasses various applications: from the transfer of design data from the engineering office to the construction site, to loading and analyzing the digital equipment production data and preparing prefilled reports all the way to archiving sample body lists and technical progress reports – it is no longer necessary for all design, equipment and production data to be painstakingly recorded by hand.

With the new process tracking system b.navigate, the BAUERdigital Portal – an innovative platform for sites – has now been expanded to include another helpful tool. Together with partners fielddata.io GmbH and abaut GmbH, BAUER Spezialtiefbau GmbH has succeeded in creating an add-on that depicts and analyzes the entire construction process in all its complexity. In addition to the existing equipment and production data, other key partial processes are recorded here that could not be depicted previously – such as the installation of concrete and reinforcement elements or the removal of drill spoil. The process tracking system b. navigate, which was developed with the aim of making comprehensive use of all existing data from a construction project, has now been nominated for the Bauma Innovation Award 2022 in the Construction category.

With the help of image recognition, intelligent cameras like the LivEye system, artificial intelligence and analysis of site production data generated in real time, the different main and secondary processes can now be identified fully automatically and used to optimize the construction process. The preparation of content and AI-based image analysis is accomplished using a platform from abaut GmbH, while the rule-based classification of the delivered data is provided by an application from fielddata.io GmbH. "A 'digital twin' of the site is created with all the relevant information about the current construction progress," explains Florian Bauer, Member of the Executive Board of BAUER AG for the function of digitalization. "b.navigate analyzes the current production progress and identifies inefficient

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processes in this context. Based on this analysis, a direct decision can be made to improve the process."

Downtimes in the construction process, for example due to waiting for concrete, can thus be recorded without manual documentation and countermeasures can be adopted in real time. In addition to the empirical data from the employees on site, thanks to b.navigate, an analyzed data base is available that forms the basis for substantiated decision-making. This makes it possible to sustainably manage the construction time, costs and use of resources, optimize processes and guarantee a more efficient use of construction equipment and materials.

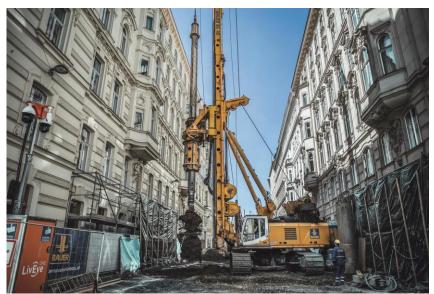
"Our common vision for the future is to obtain a direct prediction for the optimal course of further production stages using b.navigate, which will enable us to generate automatic forecasts and optimization proposals for all project participants," continues Florian Bauer. Apart from site managers and site personnel, in the future, suppliers, customers and residents will also benefit in real time from this data recording and analysis, since all work steps can be optimized and productivity can be maximized.

With b.navigate, we have succeed in taking an established method from process optimization for stationary industries and transferring this to a construction site application for the first time.

#### Contact:

If you have questions about the process tracking system b.navigate, please feel free to contact **Florian Bauer**, Member of the Executive Board of BAUER AG for the function of digitalization, Phone: +49 (8252) 97-1020, florian.bauer@bauer.de





(1) The camera system from LivEye records and transmits the partial process of site logistics to the abaut platform.





(2) The digital documentation of the construction area with fielddata.io Activity and abaut SiteView.



(3) Digital recording with a wide range of data sources and Al analysis.

All images: © BAUER Group

You can download the printable image material <u>here</u> with the password *bauer*.



#### **About BAUER Spezialtiefbau Group**

BAUER Spezialtiefbau GmbH, the parent company of the BAUER Group, has played a leading role in shaping the development of specialist foundation engineering. The company implements all common methods in foundation engineering worldwide, primarily for excavation pits, foundations, cut-off walls and ground improvement. In the process, BAUER Spezialtiefbau GmbH collaborates intensively with its more than 50 subsidiaries and branch offices around the world. Regional networks around the globe make it possible to deploy equipment, teams and expertise quickly and flexibly. Bauer Spezialtiefbau offers its customers individual, creative and economic specialist foundation engineering solutions for challenging construction projects, from design to execution. More information can be found at <a href="mailto:bst.bauer.de">bst.bauer.de</a>. Follow us on <a href="mailto:Facebook">Facebook</a>, <a href="mailto:LinkedIn">LinkedIn</a> and <a href="mailto:YouTube!">YouTube!</a>.

#### About fielddata.io GmbH

fielddata.io GmbH is a company based in Munich. The team of experienced specialists focusing on digitalization in the construction industry has taken on the task of delivering effective tools to specialist foundation engineering companies for the control and documentation of their projects. In this context, fielddata.io is heavily engaged with the topics of BIM, IoT, digitalization and in particular "Site 4.0". Using the fielddata.io platform and the various fielddata.io solutions makes it possible to reduce working hours and costs, simplify site documentation and enhance the quality of reports and analyses. Furthermore, fielddata.io makes it easier to communicate the current project status to stakeholders and the management, and helps to prevent media integration gaps on the long term. More information can be found at <a href="https://www.fielddata.io">www.fielddata.io</a>.

#### **About abaut GmbH**

abaut GmbH is a Munich-based SaaS and data analytics startup that develops products for companies along the construction and mining value chain. With the solution of a one-stop technology platform, the company aims to simplify access to technologies, services and data analysis for customers, thereby enabling them to make faster and better decisions, eliminate inefficiencies and increase productivity. More information can be found at <a href="https://www.abaut.de">www.abaut.de</a>.