

THE HEARTBEAT OF OUR INDUSTRY

Innovation Hall bauma LAB0, ICM



MESSE
MÜNCHEN



**bauma FORUM
SUPPORTING PROGRAM**

bauma.de

bauma

Monday, October 24: Construction methods and materials of tomorrow

10:00–10:20

bauma will officially be opened by:

- Stefan Rummel · *Managing Director / CEO, Messe München GmbH*
- Dr. Volker Wissing · *German Federal Minister of Transport and Digital Infrastructure*
- Dr. Markus Söder · *Bavarian Minister-President*

10:25–11:45

Decarbonizing the Construction Industry: Technological and Political Approaches

- *VDMA · Belgium*
- *Thyssenkrupp · Germany*
- *Peri · Germany*
- *TU Dresden · Germany*
- *PUC (Pontificia Universidad Católica de Chile) · Chile*

Moderation
VDMA · Germany

11:45–13:15

Presentation of the 15 nominees and winners of the bauma Innovation Award 2022* (by Martina Scherbel, VDMA)

- Climate Protection, 3 presentations
- Digitalization, 3 presentations
- Mechanical Engineering, 3 presentations
- Building, 3 presentations
- Research, 3 presentations

13:20–13:50

Digital Rebar for large infrastructure projects – deeply integrated from model to robot

Rebartek · Norway

14:00–15:10

5 startup sessions, 10 mins each

1. Shotcrete 3D Printing – Automation and Sustainability for Precast Elements*
Aeditive GmbH · Germany
2. It's time to make building climate friendly. How Sonocrete reduces concrete carbon emissions by 30%
Sonocrete GmbH · Germany
3. CO₂-reducing materials are better and cheaper*
carbonauten GmbH · Germany
4. The future of infrastructure: Upcycling tailings to 3D print sustainable structures
Hyperion Robotics · Finland
5. Automated Visual Quality Control with Artificial Intelligence
preML GmbH · Germany

15:20–15:50

Trends in production technologies for serial and modular construction*

IAB Weimar · Germany

16:00–16:30

Training for the work site of tomorrow

CM Labs Simulations · Canada

16:30–17:00

3D printed formworks and facades – is additive architecture future-proof?

voxeljet AG · Germany

17:00–17:30

Creating valuable in-spec material from CD&E waste

CDE group · United Kingdom

17:30–18:00

Build Sustainable Precast Segment Lining With Fibre Reinforced Concrete

Bekaert NV · Belgium

18:00–18:15

Closing Remarks*

Christoph Danner, VDMA · Germany

Tuesday, October 25: The way to autonomous machines

10:00–10:30

Our way to autonomous machines

Holcim Technology Ltd · Switzerland

10:30–12:00

Panel: The Way to Autonomous Machines

- *TU Bergakademie Freiberg · Germany*
- *TU München · Germany*
- *Technische Hochschule Köln · Germany*
- *Holcim Technology Ltd · Switzerland*

Moderation
VDMA · Germany

12:10–12:40

Autonomous Trenching Solutions Are Here: Build Faster, Safer, Smarter

Built Robotics · United States of America

12:40–13:50

5 startup sessions, 10 mins each

1. BauMotor – construction robotics service provider*
Bergmann-Infotech · Germany
2. KAI – Autonomous Crane with Artificial Intelligence*
Psiori GmbH · Germany
3. Predictive maintenance and condition monitoring based on real load data by means of integrated force and torque sensors*
core sensing GmbH · Germany
4. Ultra wideband technology for near field monitoring and as ground-penetrating radar
Ilmsens GmbH · Germany
5. Live Dig Radar™: Enabling autonomous excavation in urban environments
RodRadar · Israel

14:00–14:30

Bosch innovative surround sensing conquers construction market

Robert Bosch GmbH · Germany

14:40–15:10

Applied Research to Automation and Digitization in Future Construction*

TU Dresden · Germany

15:20–15:50

Legged robots in the construction industry – digital inspection and documentation on site

Hamburg University of Technology · Germany

16:00–16:30

How to solve the complexity of autonomy*

Sensor-Technik Wiedemann GmbH · Germany

16:30–17:00

It's a journey: Levels of automation (0 to 5 with 'civil construction use cases')

Trimble · United States of America

17:00–17:30

WOLFF High-Speed-Positioning-System (HiSPS)*

WOLFFKRAN GmbH · Germany

17:30–18:00

The journey to autonomous machines

Parker Hannifin · Germany

18:00–18:15

Closing Remarks

Stephan Oehme, VDMA · Germany

■ = Exhibitor presentation ■ = Keynote ■ = Start-up pitch ■ = Academia ■ = Panel discussion / Closing Remarks

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Subject to changes.

Wednesday, October 26: Mining - sustainable, efficient, reliable

10:00-10:30

Interoperability – key to efficient automation – automation in the context of economic challenges in mining*
Schulte Strathaus GmbH & Co. KG /
VDMA Mining · Germany

10:30-12:00

Panel: Mining – sustainable, efficient, reliable*
- Institute for Advanced Mining Technologies, RWTH Aachen · Germany
- BGE Bundesgesellschaft für Endlagerung mbH · Germany
- Siemens AG, Large Drives Applications Solutions, Minerals Digitalization Solutions · Germany
Moderation
VDMA Mining · Germany

12:10-12:40

Zero vision on accidents in mining
Gigasense · Sweden

12:40-13:50

5 startup sessions, 10 mins each
1. Integrated real-time Monitoring and Predictive Maintenance Services for Mining Assets
OmegaLamdaTec GmbH · Germany
2. Benefits of online environmental monitoring for mining: before, during and after operations*
ELLONA · Germany
3. Pick wear state analysis in tunneling or mining running operation
RockFeel GmbH · Germany
4. The ecosystem approach for sustainable mining: Reduce complexity and rise efficiency with one single source for truth
about GmbH · Germany
5. Decentralized Data Acquisition and Communication System for Underground Operations*
TU Bergakademie Freiberg · Germany

14:00-14:30

Improving the environmental impact of mining operations
BEUMER Group GmbH & Co. KG · Germany

14:40-15:10

Decentralized Communication System for the Interconnection of Mobile Mining Machinery
RWTH Aachen · Germany

15:20-15:50

Big Data for Small Mines – Blessing or Curse?
TU Bergakademie Freiberg · Germany

16:00-16:30

Mechanized sinking of deep shafts in hard rock
Herrenknecht AG · Germany

16:30-17:00

Let the data do the job. How the Internet of Things leverages efficiency and quality
Zonar / Continental · Germany

17:00-17:30

Reduction of Operational Costs and Environmental Footprint Through Better Haul Road Management
Cypher Environmental Ltd · Canada

17:30-18:00

Leveraging service and digital can give productivity and sustainability
FLSMIDTH · Denmark

18:00-18:15

Closing Remarks
Jörn Lehmann, VDMA · Germany

Thursday, October 27: Digital construction site

10:00-10:30

The digital job site – how and why?*

10:30-12:00

Panel: Digital Construction Site*
- Hauptverband der deutschen Bauindustrie · Germany
- Porr · Germany
- Liebherr-Werk Nenzing · Austria
- Liebherr-Kirchdorf · Germany
Moderation
VDMA · Germany

12:10-12:40

The Equipment's Engine – A Game-Changer for Digitization*
Motorenfabrik Hatz GmbH & Co. KG · Germany

12:40-13:50

5 startup sessions, 10 mins each
1. Data and data analytics to drive efficiency on construction sites – the ecosystem approach
about GmbH · Germany
2. How Sodex Innovations Automates Surveying in Civil Engineering
Sodex Innovations GmbH · Austria
3. Internet of Things (IoT) on the construction site*
zamics c/o Zeppelin Lab GmbH · Germany
4. remberg XRM – A new category of software to manage construction machines & equipment*
remberg GmbH · Germany
5. The Immersive Construction Site – Construction Planning with Augmented Reality*
Holo-Light GmbH · Germany

14:00-14:30

The digital value chain for asphalt production and the paving process – efficient and resource-saving with high-quality results*
Q Point GmbH · Austria

14:40-15:00

Availability, security and interoperability of machine data in the connected construction site
TU Dresden · Germany

15:00-15:20

Unification for intuitiveness versus differentiation for unique experience
TU Dresden · Germany

15:20-16:00

Digital Twin of Construction Processes
TU München · Germany

16:00-16:30

Digitalization in HDD drilling technology – opportunities for a modern infrastructure*
Tracto Technik · Germany

16:30-17:00

Smart rental – a PDF is by no means digitalization!*
Infosystem AG · Switzerland

17:00-17:30

How to achieve digital construction logistics excellence*
Umdasch Group Ventures GmbH · Austria

17:30-18:00

Construction 4.0 – Best practice examples from IoT projects*
Device Insight GmbH · Germany

18:00-18:15

Closing Remarks
Dr. Darius Soßdorf, VDMA · Germany

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Friday, October 28: The way to Zero Emission

10:00–10:30

The role of policy: an overview of the ambitious carbon-neutral goals to 2030 and 2050
Construction Unit, European Commission · Belgium

10:30–12:00

Panel: The way to Zero Emission
Presentations and panelists from:
- *Liebherr-EMtec · Germany*
- *ERA, European Rental Association · Belgium*
- *CECE, Committee for European Construction Equipment · Belgium*
- *Hiboo · France*
- *City of Oslo · Norway*
- *Boels Rental · the Netherlands*

12:10–12:40

Volvo Penta exhibitor presentation toward net-zero emissions
Volvo Penta · Sweden

12:40–13:50

5 startup sessions, 10 mins each
1. Racing Into a Net Zero Future
EKU Power Drives · Germany
2. Digital navigation and surveying for the construction, planning and maintenance of infrastructure projects
SitePlan GmbH · Austria
3. Why competitive construction machinery can only be driven by cloud-native CAE environments
dive solutions GmbH · Germany
4. Full performance – zero emission – what does this stand for at SUNCAR?
A fully optimized construction machine*
SUNCAR HK AG · Switzerland
5. The importance of ESG metrics in the construction industry*
Codio Impact · Germany

14:00–14:30

Fraunhofer reporting on the study BAUEN 2030 and a roadmap to a sustainable construction site in 2045
Fraunhofer IAO · Germany

14:40–15:10

Tomorrow's exhaust aftertreatment systems and electrification as keys to fuel economy and CO₂ savings
Proventia Oy · Finland

15:20–15:50

Webasto & Danfoss – A joint vision for future mobility
Webasto Customized Solutions · Germany
Danfoss Editron · Germany

16:00–16:30

Everything Energized – Challenges & Opportunities of Electrically Powered Bodies and Lifting Solutions
PALFINGER AG · Austria

16:30–17:00

Leading the charge: Bobcat T7X transforming the job site with sustainable solutions
Doosan Bobcat · United States of America

17:00–17:30

Hydrogen solutions for NRMM decarbonization
PUNCH Hydrocells from PUNCH Group · Italy

17:30–18:00

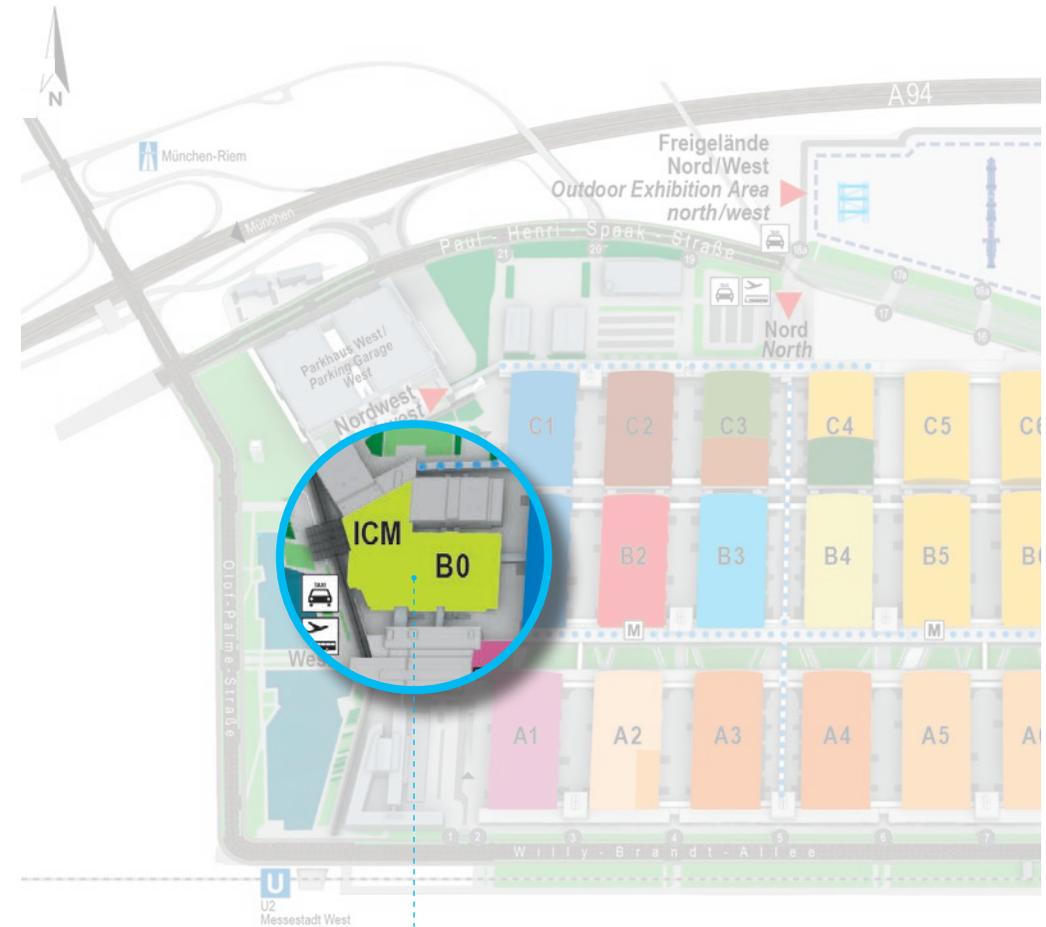
CO₂ reduction outside-in & inside-out*
Doka GmbH · Austria

18:00–18:15

Closing Remarks
- *VDMA · Germany*
- *CECE · Belgium*

SEE YOU SOON AT bauma!

October 24–30, 2022 | Messe München



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