



24./25.09.2025

# International High-Performance Mining Conference 2025

The Future is now: Capability, Collaboration and Technology  
to enable responsible Mine Production



# Dear Members of the global Mining Community,

I'm excited to announce the 4th International Conference on High-Performance Mining (HPM), taking place on 24./25.09.2025 at the Super C, located on the premises of RWTH Aachen University.

This year's conference continues our mission to inspire change in the global mining industry and make the mine of the future tangible. Over the course of two days, we will explore benchmark projects that showcase cutting-edge advancements in technology innovation, deployment, process optimization, and responsible mining practices.

The program is designed to spark thought-provoking discussions around current trends in automatization, digitalization, electrification, and the human-centered, climate-smart mine of the future. Beyond technical innovations, sessions will also address the importance and possibilities of an integration of people, technology, and the environment in innovation and transformation processes.

As an international platform for forging new connections and partnerships, the HPM 2025 will offer abundant networking opportunities in our exhibition area and our exclusive evening reception and enable you to connect with global experts and partners from across the mining industry.

It would be my pleasure to welcome you in Aachen in September!

Kind regards,  
Univ.-Prof. Dr.-Ing. Elisabeth Clausen  
Conference Host  
Director, Institute for Advanced Mining Technologies  
RWTH Aachen University







# High Performance Mining

An RWTH Aachen University event

## Why Attend?

### Be a Part of Mining's Global Future!

- Inspiring Innovations:  
Learn from case studies and success stories, presented by mine operators, technology providers, and researchers.
- Integrated Approaches:  
Explore solutions that address challenges by aligning people, technology, and environmental considerations.
- Exceptional Networking Opportunities:  
Strengthen your network during coffee and lunch breaks, the exhibition area, and the evening reception.

With a program designed to foster innovation and collaboration, the HPM 2025 provides a unique platform to showcase your company, products, and services, form new partnerships, and connect with industry and research experts from around the world. Networking opportunities abound in the exhibition area, during coffee and lunch breaks, and at the evening reception.

Over two days, the conference program will offer cutting-edge themes such as automation, digitalization, and electrification within the broader vision of a human-centered, climate-smart mine. Presentations and discussions emphasize an integrated approach, considering people, technology, and the environment, with many sessions featuring collaborative case studies jointly presented by mine operators and suppliers or research partners.

The International Conference on High-Performance Mining is a must-attend event for everyone who is actively engaged in shaping the future of the mining industry towards sustainable, smart, and innovative practices that unite humans, technology, the environment and society in a holistic manner.



# Program Overview

**September 24 – 25, 2025,  
Super C, RWTH Aachen University**

This year's 4th International Conference on High-Performance Mining (HPM) is dedicated to responsible and future-oriented mining practices. Under the heading “The Future is now: Capability, Collaboration & Technology to enable Responsible Mine Production”, we will be addressing the industry's most pressing issues – from responsible raw material extraction and sustainable production processes to the role of automation and digitalization on the way to a networked, integrated and socially acceptable mine of the future.

In addition to technical innovations, a central concern of HPM 2025 is the sustainable supply of raw materials in Europe – a topic that is becoming particularly important in view of global challenges and a changing market. Digital technologies, autonomous systems and advanced approaches in the electrification of mining serve as key drivers for making production processes not only more efficient, safer and more environmentally friendly, but also meeting the increased demands for sustainability and social acceptance.

Interactive panel discussions will also shed light on the need for further innovations that are required to master the complex challenges facing the industry. New approaches and interdisciplinary solution strategies will be presented to show how people, processes and technology can work together as an integral unit to set the course for future-oriented mining production.

HPM 2025 offers you not only high-quality presentations, but also interactive formats in which you can discuss the paths to sustainable and innovative mining production with international experts.

**The future is now - be part of it and shape it!**





Day 1 – Wednesday, 24 September 2025

08:00–09:00	Arrival networking for Lab Tour (Mining Building)
09:00–10:30	Lab Tour AMT (Mining Building)
10:30–11:00	Registration open and arrival networking (Super C)
11:00–12:00	Opening Session: Welcome by the Organizers, Greetings, Keynote
	Welcome Note; Prof. Dr.-Ing. Elisabeth Clausen
	Greetings RWTH Aachen University Prof. Peter Kukla, PhD Dean of the Faculty for Georesources and Materials Engineering
	From Innovation to Impact: How Technology Enables Future-Ready Mining Dr. Carin-Martina Tröltzsch, Executive Board, K+S AG; Deputy Chairwoman-COO
12:00–13:00	Lunch Break
13:00–14:30	Session 2: New Horizons In this session, selected case studies showcase recent mining initiatives and the challenges and opportunities they bring. Building on these insights, the session’s speakers will join a panel discussion to explore what is needed for project success – from technical capability and collaboration to social acceptance and environmental responsibility.
	Critical raw materials for construction industry: Is the supply of Gypsum secured? Daniel Schroeder, Division Manager Mining, Knauf Gips KG
	Redeveloping Europe’s (potentially) largest Fluorspar deposit Konstantin Deichsel, Manager BusinessDevelopment, Deutsche Flussspat GmbH
	Panel Discussion: Making Mining Projects Succeed
14:30–14:45	Break
14:45–16:15	Session 3: Interactive Workshop Session This interactive workshop builds on the core themes of HPM 2025 – capability, collaboration, and technology – to explore how Europe can translate strategic ambitions into responsible mining operations. Participants will examine real-world innovations such as automation, digital twins, electrification, and data-driven process optimization, and discuss the skills, partnerships, and community engagement practices needed for successful implementation. By combining technical insights with collaborative approaches, the session provides a platform to co-create pathways towards high-performance, future-ready, and socially accepted mineral production in Europe.
	From Vision to Deployment: Innovations and Collaborations for High-Performance Mining in Europe
16:15–16:30	Break
16:30–17:10	Session 4: Exhibitor Pitches
17:10–17:15	Wrap up of the Day
18:30	Reception Forum M
19:00	Opening and Sponsor Presentation
19:30	Buffet Opening
	Innovation in Action: DigiMine Pit to Port Bernardo Marinho, Global Sales Head – Minerals Automation and Digitalization

Day 2 – Thursday, 25 September 2025

08:30–09:00	Registration open and arrival networking	
09:00–09:10	Welcome and Opening	
09:10–09:30	Keynote: Collaboration as Key: Unlocking the Full Potential of Mining through Partnerships Christoph Schäfer, Managing Director and Partner, Maschinenfabrik Köppern GmbH & Co. KG	
09:30–10:30	Session 5: Autonomous Mining Autonomy is rapidly moving from vision to reality in mining. This session highlights the latest advancements in underground automation, from fully automated load & carry operations to emerging trends in hydraulic mining excavators. It concludes with a pioneering look at remote-supported shaft boring technology, demonstrating how autonomous systems can revolutionize even the most complex underground environments. Together, these presentations chart the trajectory of autonomous mining – from proven applications to groundbreaking technologies shaping the future of the industry.	
	Autonomous: Load & carry, fully automated Underground Maximilian Rolf, Co-founder & CEO, Sensmore / Thomas Weber, CEMEX, Head of Mining	
	Technology Trends of Hydraulic Mining Excavators Jonas Noske, Design Engineer / Dr.-Ing. Stefan Heitzig, Manager Research & Development New Tech Development, Komatsu Germany GmbH	
	Shaft Boring Roadheader (SBR) supported by remotely operated system for rock pre-conditioning Dr.-Ing. Bernd Steyer, Senior Global Project Manager, indurad GmbH (part of Hexagon) / Dipl.-Ing. (FH) Patrick Rennkamp, Division Manager Mining, Herrenknecht AG	
10:30–11:00	Break	
11:00–12:30	Session 6: Electrification & Digital Transformation Electrification and digitalization are transforming mining. This session showcases pioneering projects such as Europe’s first electrified mine and the digital transformation of shaft sinking, before broadening the scope to integrated pit-to-port solutions. In the concluding panel discussion, industry leaders and experts will debate how automation, electrification and digitalization can serve as catalysts for safer, cleaner, and more socially accepted mineral production across Europe and beyond.	
	Siemens Mobility & Boliden AB – Boliden’s First Electrified Underground Mine Markus Gyusok Schauen, Senior Project Manager, Siemens Mobility GmbH / Patrik Akerman, Business Developer, Siemens Mobility GmbH / Patrick Westerlund, Senior Development Engineer, Boliden AB	
	Digitalization in Shaft Sinking – Transforming Deep Excavation Project Dzianis Iholka, Head of International Department, Redpath Deilmann GmbH	
	From Pit to Port Bernardo Marinho, Head of Global Sales – Minerals Automation & Digitalization Solutions, Innomotics GmbH	
	Panel Discussion: Automation, Electrification & Digitalization as Catalysts for Responsible Mining	
12:30–13:00	Session 7: Wrap- Up and Closing: Drawing the Future of Mining – Visual Reflections from HPM 2025 As HPM 2025 comes to a close, participants are invited to step back and see the conference through a different lens. A Graphic Recorder has accompanied the entire event, capturing key ideas, insights, and connections in a single, evolving illustration. In this closing session, the final artwork will be unveiled, offering a visual journey from strategic visions to technological breakthroughs and collaborative pathways. The session provides a moment of reflection, synthesis, and inspiration – highlighting not only what has been discussed, but also how these ideas interconnect to shape the future of responsible, high-performance mining in Europe.	
13:00–14:00	Lunch Break	



# Conference fees

Learn more about the conference fees and secure your spot at HPM 2025!

Regular	475 €
Regular – Early Bird (until 31.07.)	425 €
Reduced (public institutions, authorities, speaker)	375 €

Secure your spot here: <https://tinyurl.com/HPMCON>



# Accommodation

Book your accommodation conveniently through our hotel portal for HPM 2025 participants.

[www.aachen-tourismus.de/HPM2025](http://www.aachen-tourismus.de/HPM2025)

A map of Aachen, Germany, highlighting the locations of several hotels. The map includes labels for 'Aachen West', 'Ponttor', 'Rathaus Aachen', 'Westpark', and 'Hauptbahnhof'. Red location pins mark the sites of 'Super C', 'Forum M', and 'Aquis Grana Cityhotel'. Callout boxes provide details for 'Parkhotel Quellenhof Aachen', 'INNSiDE Aachen', 'Minx-City Hotels', 'B&B Hotel Aachen-City', and 'Mercure Hotel Aachen am Dom'.

**Parkhotel Quellenhof Aachen**  
Monheimsallee 52  
The Parkhotel Quellenhof Aachen welcomes you in the heart of the city, right next to the Eurogress congress center and the Kurpark.

★★★★★  
**INNSiDE Aachen**  
Sandkaulstraße 20  
The INNSIDE by Melia Aachen is located in the middle of Aachen, a stone's throw from the main tourist attractions.

★★★★★  
**Aquis Grana Cityhotel**  
Büchel 32  
Boasting a privileged location within the centre of the historic old town of Aachen, the Aquisgrana Cityhotel features a total of 98 modern and comfortably furnished non-smoking rooms.

★★★★★  
**Minx-City Hotels**  
Seilgraben 2 / Sandkaulbach 14  
The non-smoking 3-star-superior Hotel is located in the centre of Aachen, each a 7-minute walk to the Cathedral and Eurogress Congress Centre.

★★★★★  
**B&B Hotel Aachen-City**  
Großkölnstraße 57-63  
The hotel, opened in September 2020, offers 144 air-conditioned rooms in the historic city center. Free Wi-Fi and Sky TV are included.

★★★★★  
**Mercure Hotel Aachen am Dom**  
Peterstraße 1  
Just a stone's throw away from Aachen's most popular attractions there is the 3-star-superior Hotel Mercure Aachen am Dom.



## Event Venue – Super C @ RWTH Aachen

The Super C at RWTH Aachen University offers a modern and dynamic venue that reflects the university's commitment to excellence and innovation. As one of Europe's leading technical universities, RWTH Aachen is renowned for its cutting-edge research and strong industry connections, consistently ranking among the top institutions globally for engineering and technology. Its status as a hub for interdisciplinary collaboration and groundbreaking advancements makes it the perfect setting for the International Conference on High-Performance Mining, bringing together global experts to shape the future of industry.



## Publishing Information

### **Published on behalf of the Rector by:**

RWTH Aachen University  
Institute for Advanced Mining Technologies (AMT)  
Wüllnerstr. 2  
52062 Aachen  
Phone: +49 241 80-94522  
Email: [asoerensen@amt.rwth-aachen.de](mailto:asoerensen@amt.rwth-aachen.de)  
**[www.amt.rwth-aachen.de/](http://www.amt.rwth-aachen.de/)**

### **Editor (responsible):**

Aarti-Mona Sörensen, M.A.

### **Images:**

Martin Braun

### **Layout:**

Marketing Staff Unit

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