

P R E S S R E L E A S E

## Meet Volvo prototype LX03: the intelligent future of construction

This fully autonomous, battery-electric prototype by Volvo Construction Equipment (Volvo CE) is the first real-world example of a self-learning concept wheel loader with the brains to make decisions, perform tasks, and interact with humans. It is also the first time ever a LEGO® Technic model has been turned into a real machine. While not commercially available, engineers expect that valuable insights from the LX03 will feed into applications for today and tomorrow.

Inspired by a concept devised by Volvo CE and LEGO® Technic engineers and designers, the Volvo LX03 is a remarkable milestone breaking new grounds in smart construction technology. It represents both the next stage in Volvo CE's exploration into machine intelligence and its determination to decarbonize the construction industry.

Melker Jernberg, President of Volvo CE, says: "We need to transform the construction industry with smart and more sustainable solutions that will have an impact on a global scale. The unveiling of the LX03 prototype today represents just that – and is testament to the incredible expertise of our engineers and our united commitment towards positive change. Together with the LEGO Group, we are pushing the boundaries of both technology and imagination and the result is beyond anything the world has seen before."

Lars Stenqvist, Chief Technology Officer of Volvo Group, says: "As transport and infrastructure leaders we have a vital role to play in taking action on climate change and stepping up the pace of innovation needed to deliver on emissions targets. We believe in working with driven and creative partners who, like us, are focused on making innovation real and moving beyond just words."

### Pioneering partnership

What started out as an exciting project between designers and engineers at the two companies, to explore the potential for future construction, evolved over time with the help of a team of children into the successful launch of the 42081 LEGO® Technic Concept Wheel Loader ZEUX.

The LEGO Group's Head of Product for LEGO Technic, Niels Henrik Horsted says: "Our two companies have enjoyed an extremely successful partnership over the years in which we have collaborated on several LEGO Technic models. But this is the first time we are making a real machine based on a model and not the other way around – and that is what makes this a truly unique project."

## Collaborative machines

The prototype LX03 has been built by a dedicated team of engineers and programmers from Volvo CE sites in Eskilstuna, Sweden and Konz, Germany, in collaboration with the design team in Gothenburg, Sweden. It is a 5-ton wheel loader that has been developed as a modular concept, with the capability of being made larger or smaller with just one or two changes to the manufacturing process. It also shares its driveline with the L25 Electric, making it a zero emission, low-noise machine with a runtime of up to eight hours depending on its application.

It is designed to be a smart and safe worker, equipped with a brain that has the capacity to adapt to different scenarios, make decisions in real-time and most importantly collaborate with humans. It can be programmed by customers to complete heavy, repetitive or dangerous tasks, reducing the need for a human on site.

Insights from the testing of the Volvo prototype LX03 will feed into applications for today and tomorrow.

For more information on what makes this game changing concept machine so unique please visit <https://www.volvoce.com/global/en/this-is-volvo-ce/what-we-believe-in/innovation/zeux/>.  
For more images: <https://images.volvoce.com/categories>

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