



Bosch at the ready with range of mobility solutions for today's fleets at ACT Expo 2025

Technologies across BEV, hybrid, hydrogen and the supporting ecosystems on display

- ▶ Bosch unveiling new hydrogen injectors, compact fuel cell power modules and updated thermal management systems at ACT Expo April 28-May 1
- ▶ CryoPump from Bosch Rexroth provides an efficient liquid hydrogen re-fueling solution for up to approximately 600 miles of range
- ▶ Showcasing diverse portfolio for commercial vehicles in Booth #6727

Anaheim, Calif. – Commercial vehicle applications across all classes are highly diverse, influenced by factors such as load, power, range, terrain and ultimately, total cost of ownership. As a longtime powertrain leader, Bosch recognizes the need for a broad technological approach to meet the needs of manufacturers and their fleet customers while maintaining an enduring focus on reduced emissions.

At the 2025 Advanced Clean Transportation (ACT) Expo in Anaheim April 28-May 1, Bosch will showcase key elements of its diverse portfolio for commercial vehicles in Booth #6727.

“To meet the varying needs of customers, society and the environment, it is essential to embrace all available technologies to guide a flexible and effective approach towards future mobility,” said Peter Tadros, president, Power Solutions, Bosch in North America.

ACT Expo firsts

The Bosch booth will feature several new and updated products and technologies, including hydrogen injectors, compact fuel cell power modules and updated thermal management systems.

- **Fuel cell power module compact 300** – An innovative advancement in the Bosch mobile fuel cell portfolio. This cutting-edge design incorporates a single set of fuel cell components and a horizontal double stack, targeted to enable a power output of 300 kW. It is designed to have an improved power-to-weight ratio and a higher degree of system integration, continuing to push fuel cell technology forward.
- **Compact gas compressor** – This new compression technology will be on display at ACT Expo 2025. It can compress over 11 standard cubic meters of hydrogen per hour to as much as 350 bar and is suitable for other gases such as nitrogen, helium and carbon dioxide.
- **Thermal management** – Bosch will display thermal management systems and how they play a crucial role in enhancing efficient, economical and comfortable mobility for hybrid and electric vehicles. By intelligently managing cooling and heat, these systems may help to

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increase the range of electric vehicles, making them more attractive and suitable for everyday use.

- **Hydrogen injectors** – Specialized low-pressure direct injection systems for hydrogen engines used in commercial and offroad vehicles will be on display. The injectors are designed to operate without any external lubrication and are highly resistant to hydrogen embrittlement.
- **Hydrogen Engine Alliance** – Bosch is one of the founding members of [The Hydrogen Engine Alliance – North America \(H2EA-NA\)](#), dedicated to advancing hydrogen-powered internal combustion engines (H2-ICEs) as a key solution for low-carbon transportation and industrial applications. Modeled after the success of Europe's [Allianz Wasserstoffmotor](#), the Alliance unites leaders from academia, industry, government and the public to foster collaboration, innovation and knowledge sharing in hydrogen technology.

Bosch continues to offer its customers a variety of technology options for the powertrain with an enduring focus on increasing efficiency and reducing emissions.

The company continues to innovate on the internal combustion engine (ICE) while also supporting electrification and hydrogen technology for mobility.

Fast, cost effective, hydrogen re-fueling and new electrolysis stacks

Bosch Rexroth is pioneering new hydrogen re-fueling solutions aimed at unlocking the hydrogen transportation ecosystem. Working with the U.S. market leader for the commercial operation of hydrogen filling stations, FirstElement Fuel, in California, Bosch Rexroth has developed a **CryoPump** platform that can compress up to 600 kg of hydrogen per hour. It is the first in the industry to help meet the SAE J-2601 10-minute fill protocol for a class 8 truck via direct filling, which allows for approximately 600 miles in range. This aims to eliminate the need for complex and expensive storage systems. Overall, this new standardized platform has the potential to dramatically reduce hydrogen losses, increase reliability while reducing onsite construction costs and time to deploy supporting both light-duty, medium-duty and heavy-duty hydrogen platforms.

Bosch is developing hydrogen technology for mobility globally and is in support of a hydrogen economy. For example, Bosch is developing technical solutions for the production, infrastructure and use of hydrogen.

At the recent Hannover Messe trade fair 2025, Bosch highlighted its focus on hydrogen production by premiering the Hybrion PEM (proton exchange membrane) electrolysis stack as a modular container solution integrated into an electrolysis system through integration partners. The company is applying its fuel-cell expertise to hydrogen production and aims to use its experience in volume production to achieve economies of scale and reduce costs in the future. Bosch is already working with many companies in North America, including AKA Energy Systems H2B2 Electrolysis Technologies, NEUMAN & ESSER (NEA) and Nikkiso, in the area of electrolyzer technology.

For more information on Bosch mobility visit [bosch-mobility.com](https://www.bosch-mobility.com).

Press photos are available on the Bosch Media Service at us.bosch-press.com.

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About Bosch

Having established a presence in North America in 1906, today the Bosch Group employs more than 41,000 associates in more than 100 locations in the North American region (as of Dec. 31, 2024). According to preliminary figures, Bosch generated consolidated sales of \$17.4 billion in the U.S., Mexico and Canada in 2024. For more information visit www.bosch.us, www.bosch.mx and www.bosch.ca.

The Bosch Group is a leading global supplier of technology and services. It employs roughly 417,900 associates worldwide (as of December 31, 2024). According to preliminary figures, the company generated sales of 90.5 billion euros in 2024. Its operations are divided into four business sectors: Mobility, Industrial Technology, Consumer Goods, and Energy and Building Technology. With its business activities, the company aims to use technology to help shape universal trends such as automation, electrification, digitalization, connectivity, and an orientation to sustainability. In this context, Bosch's broad diversification across regions and industries strengthens its innovativeness and robustness. Bosch uses its proven expertise in sensor technology, software, and services to offer customers cross-domain solutions from a single source. It also applies its expertise in connectivity and artificial intelligence in order to develop and manufacture user-friendly, sustainable products. With technology that is "Invented for life," Bosch wants to help improve quality of life and conserve natural resources. The Bosch Group comprises Robert Bosch GmbH and its roughly 470 subsidiary and regional companies in over 60 countries. Including sales and service partners, Bosch's global manufacturing, engineering, and sales network covers nearly every country in the world. Bosch's innovative strength is key to the company's further development. At 136 locations across the globe, Bosch employs some 86,900 associates in research and development, of which nearly 48,000 are software engineers.

The company was set up in Stuttgart in 1886 by Robert Bosch (1861–1942) as "Workshop for Precision Mechanics and Electrical Engineering." The special ownership structure of Robert Bosch GmbH guarantees the entrepreneurial freedom of the Bosch Group, making it possible for the company to plan over the long term and to undertake significant upfront investments in the safeguarding of its future. Ninety-four percent of the share capital of Robert Bosch GmbH is held by Robert Bosch Stiftung GmbH, a charitable foundation. The remaining shares are held by Robert Bosch GmbH and by a company owned by the Bosch family. The majority of voting rights are held by Robert Bosch Industrietreuhand KG. It is entrusted with the task of safeguarding the company's long-term existence and in particular its financial independence – in line with the mission handed down in the will of the company's founder, Robert Bosch.

Additional information is available online at www.bosch.com, www.iot.bosch.com, www.bosch-press.com.

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