

Alstom attends UIC World Congress on High-Speed Rail and MODERN RAILWAYS 2025

- Alstom is the only supplier of double-deck very high-speed trains worldwide, 1 out of 5 high-speed trains in the world is entirely made by Alstom
- Three high-speed train models showcased at the exhibition the technological strengths of the Avelia range, with Chinese joint venture AST supporting train delivery for Sweden projects
- Focusing on sustainability and smart mobility, Alstom experts deliver keynote presentations at the Congress

9 July 2025 – Alstom, a global leader in smart and sustainable mobility, is participating in the 12th World Congress on High-Speed Rail and exhibiting at the 17th MODERN RAILWAYS, held from 8 to 10 July at the China National Convention Centre in Beijing. Alstom is showcasing its technological expertise and leadership in high-speed rail, with a particular focus on green and smart innovations and solutions across the Avelia high-speed train portfolio.

At the World Congress on High-Speed Rail parallel sessions, five Alstom experts are delivering keynote presentations, sharing perspectives on sustainable high-speed rail design, passenger experience, system optimisation and flexible operations and maintenance. At the MODERN RAILWAYS exhibition, Alstom is featuring scale high-speed train models, an immersive VR experience and an interactive virtual show room, highlighting the company's integrated capabilities across train systems, key components, signalling and full lifecycle services, offering a vivid interpretation of its vision for the future of high-speed mobility powered by green and smart integration.



Ming Geng, Managing Director of Alstom China, stated, "High-speed rail is undergoing continuous global expansion and technological transformation. As a leading provider of high-speed rail solutions, Alstom offers not only a robust product portfolio and proven market experience, but also continues to advance in sustainability, passenger experience and flexible operations. We remain committed to supporting our customers through technological innovation, helping them build greener, more efficient and smarter high-speed rail systems, and contributing to the high-quality development of rail transit."

Outstanding track record and unique portfolio make Alstom the world leader of high-speed rail. Alstom has more than 40 years' experience of designing and manufacturing high-speed trains. The Avelia range forms one of the most comprehensive and competitive product portfolios in the industry. The Avelia high-speed range covers maximum operating speeds between 200 km/h and 320 km/h. Models can be either single-deck or double-deck, and with or without tilting technology. Alstom is the only supplier of double-deck high-speed trains worldwide. Half of the world's high-speed fleet in operation is built with Avelia technology, and 1 out of 5 high-speed trains in the world is entirely made by Alstom. More than 2,900 high-speed trains with Avelia technology have been sold throughout the world. Trains with Alstom Avelia technology is operating in 25 countries, crossing 20 borders. Today, we are striving for excellence in comfort, capacity, and a sustainable product life cycle which is not lesser challenge.

During the parallel sessions of the UIC World Congress on High-Speed Rail, Alstom experts presented on topics such as How to design high-speed trains to address market liberalisation; How rolling stock can maximize value generation from a high-speed network; How modularity and flexibility of maintenance plans are crucial for small high-speed fleets, and onboard augmented freedom to enhance passenger satisfaction. One session also highlighted the Avelia Horizon project's achievements in sustainable design, covering energy efficiency optimisation, carbon emissions reduction and resource circularity across the entire train lifecycle. It further illustrated how the project contributes indirectly to high-quality employment within the rail value chain and promotes stringent sustainability standards throughout the supply chain.

At MODERN RAILWAYS, Alstom presented three representative scale models of its high-speed trains, offering a comprehensive demonstration of the technological strengths and product diversity of the Avelia range. Avelia Horizon, a double-deck very high-speed train running at over 300 km/h, features articulated architecture and new compact trains, guarantees the highest levels of safety and passenger experience, offers high operational flexibility, while reducing energy consumption and maintenance costs. The first application of Avelia Horizon will be TGV-M for SNCF. Two other models from the Avelia Stream range were also on display, covering service speeds of 200–300 km/h. They offer a strong track record of reliable performance, a high level of passenger comfort, and multiple configuration options to meet the specific needs of operators. These include: The VT (Västtrafik) regional train for Sweden, manufactured by Alstom Chinese joint venture Alstom Sifang (Qingdao) Transportation Ltd. (AST)¹. Initial delivery of five trains in 2020, with full series production of 40 trains scheduled for completion by Q1 2027. The SJ250 high-speed train, also produced by AST, is a 6-car Zefiro Express electric high-speed train for Sweden and is set to become the fastest train in the country's history with a top speed

¹ Alstom Sifang (Qingdao) Transportation Ltd. is 50% owned by Alstom Group. Merger by equity method.

of 250 km/h. The train is engineered to operate in harsh winter conditions, down to -40°C and run through an 80 cm snow drift.

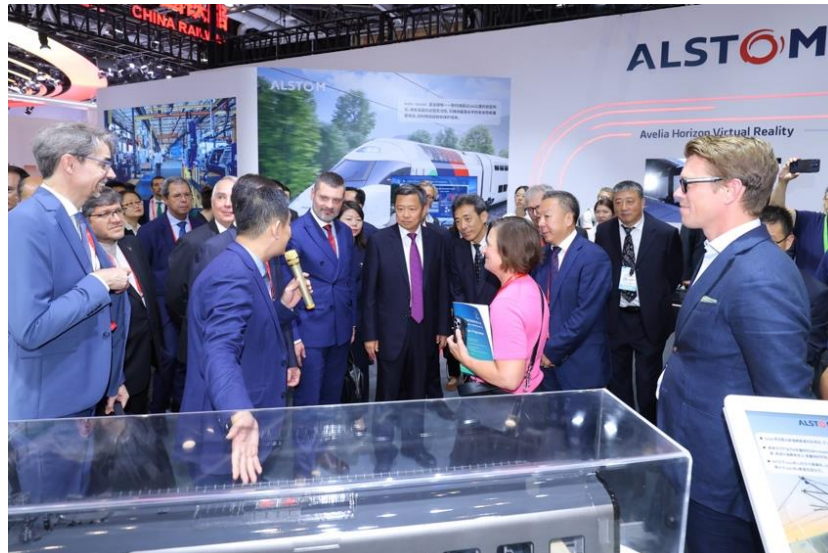
Also on display was the Dispen railway-specific oil-pressure damper, manufactured by Alstom's Chinese joint venture Qingdao Alstom Railway Equipment Co., Ltd. (DISPEN)², which has produced 1 million dampers to date, serving the global market. Featuring Alstom's proprietary design, the product offers high reliability and ease of maintenance, helping to reduce wear on vehicles and infrastructure, extend service life, and optimise total lifecycle costs. Its unique dual-flow mechanism enhances ride stability and contributes to smoother train operation.



In addition, the booth featured a VR immersive experience zone where visitors could wear glasses and virtually step inside the Avelia Horizon double-deck high-speed train. They could experience first-hand its spacious layout, comfortable seating and a range of innovative interior features— offering a glimpse into the intelligent and seamless high-speed travel of the future. The booth also included a Virtual Show Room, where visitors could explore Alstom's comprehensive solutions across rolling stock systems, key components, signalling and lifecycle services through an interactive touchscreen interface.

Looking ahead, Alstom remains committed to advancing high-speed rail technology with a focus on efficiency, intelligence and sustainability. With its global expertise and extensive project delivery record, the company aims to support the continued expansion and modernisation of high-speed rail networks worldwide — building a smarter, greener and more efficient future of high-speed rail.

² Alstom Qingdao Railway Equipment Co., Ltd. is 51% owned by Alstom Group.



Alstom Sifang (Qingdao) Transportation Ltd. (AST), one of Alstom's key strategic ventures in China, is dedicated to integrating Alstom's world-leading high-speed rail technology and advanced manufacturing expertise with local market needs. AST offers full-process capabilities encompassing train design and manufacturing, maintenance, and after-sales services. Its main product lines include the CRH1A, CRH1E, CRH380D and Qinghai-Tibet Tourist Passenger Cars, which are widely deployed across China's high-speed railway network. With over two decades of development, AST has grown into one of the most competitive and significant rail transit equipment manufacturers in the Chinese market.

Present in China for over 60 years, Alstom participates in the full spectrum of China's railway projects. Alstom in China now has a complete range of rolling stock (high-speed trains, railway passenger cars, locomotives, metro, automated people movers, monorail and trams), state-of-the-art components (traction systems, bogies, traction motors, dampers), customised services as well as infrastructure and signalling solutions.

Alstom in China has eleven joint ventures, and almost 10,000 employees. Together, the joint ventures have delivered more than 6,000 railway passenger cars and 1,530 electric locomotives, more than 7,200 metro cars, over 900 monorail cars, 136 automated people mover cars, and 191 tram cars to China's growing rail transit market as well as to overseas markets. In China, Alstom also provides customers with a wide range of services solutions, from heavy maintenance to modernisations, and currently has more than 4,100 metro cars under maintenance contracts. It is a major signalling supplier to the Chinese high-speed network, and through its joint ventures, its signalling systems and propulsion equipment are utilised in more than 110 urban mass transit lines.

ALSTOM™, Zefiro™, Avelia Horizon™ and Avelia™ are protected trademarks of the Alstom Group.

**About
Alstom**

Alstom commits to contribute to a low carbon future by developing and promoting innovative and sustainable transportation solutions that people enjoy riding. From high-speed trains, metros, monorails, trams, to turnkey systems, services, infrastructure, signalling and digital mobility, Alstom offers its diverse customers the broadest portfolio in the industry. With its presence in 63 countries and a talent base of over 86,000 people from 184 nationalities, the company focuses its design, innovation, and project management skills to where mobility solutions are needed most. Listed in France, Alstom generated sales of €18.5 billion for the fiscal year ending on 31 March 2025.

For more information, please visit www.alstom.com.

Contacts

Press:

Li WANG

li.wang@alstomgroup.com