

Media release

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Stadler unveils the RS ZERO in the Czech Republic: paving the way for zero emission rail transport

At the Rail Business Days in Ostrava, Stadler presented the groundbreaking RS ZERO vehicle for the first time in Central Europe. RS ZERO is poised to redefine rail travel on Czech railways without electrification.

The Czech Republic is the second country in the world after Germany where the game-changing vehicle was presented. The RS ZERO is a fully decarbonized vehicle that showcased its advanced capabilities during the Czech largest professional gathering in rail transport held annually in Ostrava. This innovative train operates on both hydrogen and battery power, providing a sustainable solution to the pressing challenges faced by Central European public transport networks without electrification.

- "I truly believe that our RS ZERO can replace diesel vehicles, represents a compelling solution for modernizing the fleet in the Czech Republic's non-electrified routes" - said Peter Spuhler, chairman of the Supervisory Board of Stadler. "The RS ZERO is capable of Co2-emission-free operation with exceptional versatility, functioning on both electrified and non-electrified rail tracks. I am very pleased to present this vehicle in Ostrava today."

The Czech Republic, located at the heart of Central Europe, boasts a dense rail network with high traffic, yet only 35% of the rail network is currently electrified. The remaining lines are served by old diesel vehicles that need to be replaced.

"The modernization of rolling stock and railway lines is a key priority for both the Czech government and neighboring countries. There is a clear need for sustainable solutions that increase financial efficiency and environmental protection", explaines Zdeněk Majer, chairman of the Supervisory Board of Stadler Prague. - "The RS ZERO embodies our commitment to the development of rail travel, providing comfort, efficiency and respect for nature - especially on non-electrified lines. I'm especially proud that engineers from our Stadler branch in Prague also participated in the development of this groundbreaking vehicle. I hope that we will soon see the RS Zero on Czech tracks and will contribute to the transformation of railways in the country" - emphasizes Zenek Majer.



Stadler - leader in zero-emission drives

Stadler is a leader in alternative drive technologies, having sold a total of 299 zero-emission vehicles to date, comprising 271 battery-powered FLIRT Akku units and 28 hydrogen-powered FLIRT H₂ trains. Both vehicle models have set Guinness World Records, with the FLIRT Akku achieving a range of 224 kilometers on a single battery charge, and the FLIRT H₂ covering an impressive 2,803 kilometers without refueling. These milestones underscore Stadler's technological leadership and its commitment to providing proven green solutions, especially in areas where rail infrastructure is not electrified.

Key features and technical specifications of the RS ZERO:

- Successor to the acclaimed RS1 model.
- Fully decarbonized propulsion system tailored for non-electrified and partially electrified routes.
- Available as single or double-car units with seating for up to 165 passengers.
- Perfectly suited for regional services with lower traffic demands, offering low-emission and emission-free hybrid operation.
- Exceptional range capabilities: up to 150 km per battery charge, or an impressive 800 km with the cutting-edge hydrogen propulsion system.

Stadler in Czech Republic

Stadler Praha s.r.o. is a key engineering hub in the Stadler Group, significantly enhancing the development of modern rail vehicles in Central and Eastern Europe since 2009. With a workforce that has grown from 30 to over 250 qualified engineers, the company honors the tradition of Czech railway engineering while providing comprehensive services, including design, systems integration, and homologation. Through partnerships with technical universities, Stadler Praha supports the next generation of engineers. The company has successfully engaged in numerous international projects, collaborating with clients across Europe. Stadler Praha plays a crucial role in transforming rail transport in the region, delivering substantial added value to the Czech market and strengthening its position within the global rail industry.

About Stadler

Stadler has been building trains for over 80 years. The provider of mobility solutions in rail vehicle construction, service and signalling technology has its headquarters in Bussnang in eastern Switzerland. More than 15,200 employees work at 8 production and 6 engineering locations as well as over 80 service locations, including over 5,600 employees in Switzerland. The company is aware of its social responsibility for sustainable mobility and therefore stands for innovative, sustainable and durable quality products. The product range in the mainline and urban transport sector includes high-speed trains, intercity trains, regional and suburban trains, underground trains, tram-trains and trams. Stadler also manufactures mainline locomotives, shunting locomotives and passenger coaches. Stadler is the world's leading manufacturer of rack-and-pinion railway vehicles.



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