

## Things are going streamlined at the Audi museum mobile: new special exhibition on the history of aerodynamics

- **Current exhibitions at the Audi museum mobile and the August Horch Museum show aerodynamic concepts used in automotive engineering**
- **Now in Ingolstadt: Aerodynamics Part 1 – The beginnings to 1945; from December 1 in Zwickau: Part 2 – Aerodynamics from 1945 to the present day**
- **A highlight at the Audi museum mobile: Model of the Audi Type C Jaray**

Ingolstadt, November 17, 2023 – The new special exhibition at the Audi museum mobile could hardly be more topical: With the advent of electromobility, aerodynamics has again become the focus of vehicle development. Audi Tradition is inviting everyone interested in technology on a journey through the history of aerodynamics, showing the beginnings of aerodynamic concepts used in automotive engineering up to 1945 in an exhibition titled “Windschnittig” (German for “streamlined”) at the Audi museum mobile. From December 1, the August Horch Museum in Zwickau will follow with an exhibition titled “Form vollendet” (German for “perfect form”), which will complete the arc of aerodynamic development up to the present day. Both exhibitions will run until June 2024.

Edmund Rumpler, Paul Jaray, and Baron Reinhard von Koenig-Fachsenfeld are names that no historian of aerodynamics can ignore. In the early 1900s, these three pioneers of aerodynamics began to adapt the body shapes of automobiles to match the flow of air. They came up with some astounding ideas, encouraged by a growing enthusiasm for aviation at the time and often inspired by patterns found in nature. Shapes like wings and teardrops served inventors as vital wellsprings of ideas. At first, however, it was anything but easy for engineers to get their ideas accepted. At that time, their aerodynamic bodywork designs, based on scientific findings, were too far removed from what customers and manufacturers expected in a car. However, new research and design methods, such as wind tunnel research, helped change people's thinking.

### **An aerodynamic concept tested in racing: “Streamline”**

Streamline is a term taken from the scientific study of fluids. In the period between the two world wars, this unique shape fascinated aerodynamics researchers. Engineers aimed to reduce vehicle bodies' air resistance to lower fuel consumption and make cars more suitable for long-distance driving. Motorsport offered an ideal testing ground for manufacturers. For example, in early 1937, the racing department at Auto Union AG began developing a fully streamlined car based on the Auto Union Type C. The engine and chassis remained virtually unchanged. The design of the streamlined body was primarily based on the work of Josef Mickl, the aerodynamics engineer from the Porsche design office. The streamlined car made its debut at the AVUS race in 1937, where it achieved record speeds of over 400 km/h (249 mph) in numerous record-breaking runs.

The new special exhibition “Streamlined” at the Audi museum mobile presents the research and development, the driving personalities, and the basic aerodynamic concepts of the period up to 1945. Rare and unique vehicles are also on display – more than a dozen large exhibits. They document the remarkable combination of efficiency, sustainability, and design unique to aerodynamics.

Stefan Felber, curator of the Audi museum mobile: “The highlight of our cross-brand special exhibition is the Audi Type C Jaray, which was completed in 2023. Experts had assumed that this car was built by Paul Jaray, based on a Audi Type K. During preparations for the special exhibition, the exhibition team’s research proved that this vehicle must have been based on an Audi Type C.” From December 1, anyone interested in how aerodynamics developed after 1945 can dive into its post-war history at the August Horch Museum in Zwickau. Visitors to the museum can look forward to almost two dozen large exhibits and other models in the follow-up exhibition titled “Form vollendet.” Thomas Stebich, who is responsible for both the Audi museum mobile and the August Horch Museum, emphasizes: “Our two-part exhibition series in both museums will present for the first time a comprehensive overview of the subject of aerodynamics from its beginnings to the present day.” From July 2024, the second part of the exhibition titled “Form vollendet” will move to the Audi museum mobile in Ingolstadt.

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The Audi logo consisting of four rings symbolizes the Audi, DKW, Horch, and Wanderer brands, which were merged into Auto Union in 1932. Auto Union and NSU merged in 1969 and played a major role in shaping the development of the automobile. Finally, in 1985, Audi NSU Auto Union AG became AUDI AG. Since 1998, Audi Tradition/Auto Union GmbH, together with NSU GmbH, has been maintaining and presenting Audi's extensive and wide-ranging history. The Audi museum mobile at the Audi Forum Ingolstadt is open Monday to Friday between 9:00 a.m. and 5:00 p.m. and from 10:00 a.m. to 4:00 p.m. on Saturdays, Sundays, and public holidays. The August Horch Museum Zwickau is open Tuesday through Sunday from 9:30 a.m. to 5:00 p.m. AUDI AG and the city of Zwickau each hold a 50 percent stake in August Horch Museum Zwickau gGmbH. [www.audi.de/tradition](http://www.audi.de/tradition)

Audi Tradition supports the work of Audi Club International e. V. (ACI). The umbrella organization officially recognized by AUDI AG represents all of the Audi brand clubs as well as the clubs of the predecessor brands of today's AUDI AG. For more information, please visit [www.audi-club-international.de](http://www.audi-club-international.de)

The Audi Group is one of the most successful manufacturers of automobiles and motorcycles in the premium and luxury segments. The Audi, Bentley, Lamborghini, and Ducati brands operate manufacturing facilities at 21 locations in 12 countries. Audi and its partners maintain a presence in more than 100 markets worldwide.

In 2022, the Audi Group delivered 1.61 million cars from the Audi brand, 15,174 cars from the Bentley brand, 9,233 cars from the Lamborghini brand, and 61,562 motorcycles from the Ducati brand to customers. In fiscal 2022, the Audi Group generated earnings of 7.6 billion euros on revenues of 61.8 billion euros. The Audi Group currently has more than 87,000 employees worldwide, some 54,000 of whom work at AUDI AG in Germany. With its attractive brands and new models, innovative mobility offerings and pioneering services, the company is systematically continuing on its path to becoming a provider of sustainable, individual premium mobility.

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