
In the rear-view mirror: The first cars "hopped" off the production line 100 years ago

A quarter of a century after the start of its vehicle production, Opel was the first German car manufacturer to introduce assembly line production 100 years ago. The first car to "roll off the assembly line" in Germany in 1924 was the Opel 4/12 PS "Laubfrosch", which was always painted green. Large-scale production made the new model affordable for many people who until then could not afford an automobile. Around 120,000 Opel 4 PS were produced between May 1924 and June 1931.

Instead of being large and black like most models, the Opel was small and green - which earned it the nickname "tree frog" in the vernacular. The vehicle featured numerous innovations, including the four-cylinder block engine with directly flange-mounted transmission, removable cylinder covers, oil pump lubrication, steel multi-plate clutch, adjustable windshield and steel disk wheels. Like the wheels, the vehicle frame was also made of pressed steel; a body made of steel and wood sat on top. The 1.0-liter in-line four-cylinder engine accelerated the small car to a top speed of 60 km/h. A continuous speed of 50 km/h was achieved in third gear. The gearshift of the right-hand drive vehicle was no longer mounted on the outside, but - very modern for the time - was easily accessible in the middle of the vehicle.

The Laubfrosch, initially offered as a two-seater and later as an extended three-seater, was 3.20 meters long, 1.35 meters wide and 1.65 meters high, had a folding top as weather protection and even a trunk integrated behind the seat bench in the pointed rear. Over the years, the engine capacity grew to 1.2 liters and the power output from twelve to 20 hp (the number 4 stood for the so-called tax hp). Although Citroën accused Opel of plagiarizing the Laubfrosch from the Type C or 5 CV, the complaint was dismissed.

The "car for everyone", as Opel advertised at the time, cost 4500 Rentenmark at the start of production - not much compared to other vehicles, but still as much as a home at the time. It eventually became the people's Opel because its sales price fell from year to year thanks to the continuous development of assembly line technology. In 1930, the Opel 4/20 PS was available in the simple two-seater version for as little as 1990 Reichsmark. With more than 100,000 units produced, it had already established itself as the ideal and affordable automobile for commercial contemporaries such as country doctors, architects and sales representatives.

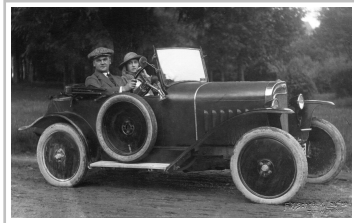
The success of the first mass-produced automobile in Germany was not foreseeable when the Opel brothers decided in 1923 - in the middle of the inflationary period - to manufacture a vehicle using completely new production methods and thus decisively advance German automobile production. Shortly beforehand, Fritz von Opel had taken a closer look at assembly line technology and the use of modern machine tools on a trip to the USA; he took further inspiration from France. Then things moved quickly: the Opel brothers invested the enormous sum of around one million gold marks to modernize the plant in Rüsselsheim and convert it from individual to assembly line production. The first assembly line was 45 meters long - not much by today's standards, but it revolutionized production. The conveyor chains that soon ran through the factory were also new. They made the days when workers had to fetch their materials by hand or with a cart a thing of the past. Crankcases, camshafts and cylinder blocks were now transported on conveyor belts. The heart of the factory, the assembly line, also grew steadily: by 1928, assembly line production at the Rüsselsheim plant already stretched over a length of around two kilometers.

Production on the assembly line reduced production times to a minimum. While Fritz von Opel hoped for a daily output of 25 vehicles in the spring of 1924, by the end of the year it was already 100 cars, and just a few months later 125 Leaf Frogs were hopping off the production lines every day. Due to the increasing quantities, production costs fell and the already low cost price of the Opel 4 PS could be reduced, which boosted demand, which



could be promptly met again with the new production method at the time. A real win-win situation. The Opel Laubfrosch thus became a milestone for the German automotive industry and its history. (aum)

Images for article



Opel 4/12 PS "Laubfrosch" (1924).

Photo: Autoren-Union Mobilität/Opel



Assembly line at the Opel plant in Rüsselsheim in the 1920s.

Photo: Autoren-Union Mobilität/Opel



The 50,000th Opel 4/12 PS "Laubfrosch".

Photo: Autoren-Union Mobilität/Opel



Opel 4/12 PS "Laubfrosch" (1924).

Photo: Autoren-Union Mobilität/Opel



Opel 4/12 hp convertible.

Photo: Autoren-Union Mobilität/Opel

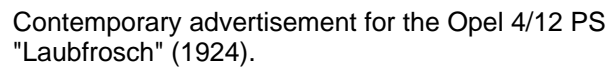


Photo: Auto-Medienportal.Net/Opel



English advertisement for the Opel 4 PS (1925).

Opel advertisement from 1925 for daily production.

Photo: Autoren-Union Mobilität/Opel



Opel advertisement from 1925.

Photo: Autoren-Union Mobilität/Opel



Opel 4/12 PS "Laubfrosch" (1924).

Photo: Autoren-Union Mobilität/Opel



Opel 4/12 PS "Laubfrosch" (1924).

Photo: Autoren-Union Mobilität/Opel



Opel 4/12 PS "Laubfrosch" (1924).

Photo: Autoren-Union Mobilität/Opel



Opel 4/12 PS "Laubfrosch" (1924).

Photo: Autoren-Union Mobilität/Opel



Opel 4/12 PS "Laubfrosch" (1924).

Photo: Autoren-Union Mobilität/Opel



Opel 4/12 PS "Laubfrosch" (1924).

Photo: Autoren-Union Mobilität/Opel



Opel 4/12 PS "Laubfrosch" (1924).

Photo: Autoren-Union Mobilität/Opel