130
YEARS

NEWSLETTER NO. 4

Škoda and Technology

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NEWSLETTER NO. 4

Škoda and Technology

This fourth newsletter concludes our series dedicated to the 130-year history of Škoda Auto. Each of the previous issues focused on a specific topic, and this edition is no different. You could almost say that we saved the best for last, because the combination of Škoda and technology has always been and continues to be absolutely crucial to everything the carmaker does.

Since its inception, Škoda Auto has been a prime example of how success is inevitable when vision, enthusiasm, hard work, and perseverance are combined with technical skill, craftsmanship, innovation, and the ability to always find smart solutions. These qualities ofcourse characterize Škoda employees till this day – they are their irreplaceable and unique added value in the global world.

Mechanical engineering, automotive design and construction have always been strongly present in the Czech Republic, and this tradition can still be seen today in the skill of Škoda Auto's employees. However, there is one more thing that is typical of them and that everyone envies – their ability to come up with functional technical solutions. This newsletter, dedicated primarily to technology, is proof of that.

Enjoy reading!

Škoda Auto currently has the widest model range in its history, combining the best of the worlds of combustion engines and electromobility.

From manual labor to Industry 4.0 and AI

130 years ago, entrepreneurs **Václav Laurin** and **Václav Klement** started out with two workers and one apprentice in a modest workshop. The machinery was only hand- or foot-powered, but after a few months, a steam engine took over most of the hard work. Later, the company also operated its own hydroelectric power plants, and individual machines were powered by quiet electric motors.

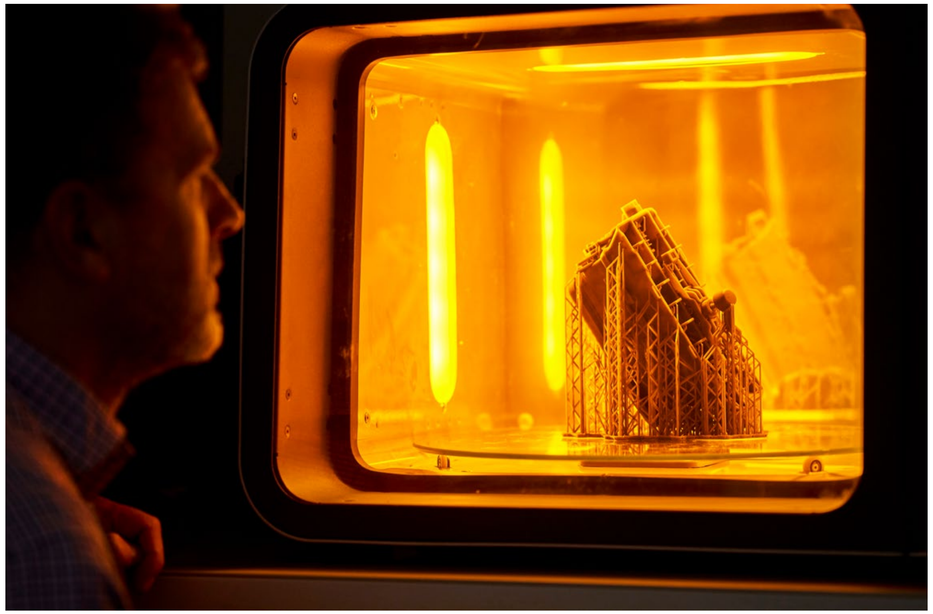
Unlike many of its competitors, Laurin & Klement prioritized its **own technical development** over purchasing licenses. This also applied to the production of the vast majority of components, including jigs and **special tools**. Incidentally, the first factory racing driver, **Narcis Podsedníček**, was originally a file cutter by profession. Woodworking also played an important role, as wood accounted for about one-fifth of the weight of new cars at the time and was also used for body molds, various jigs, and transport crates.

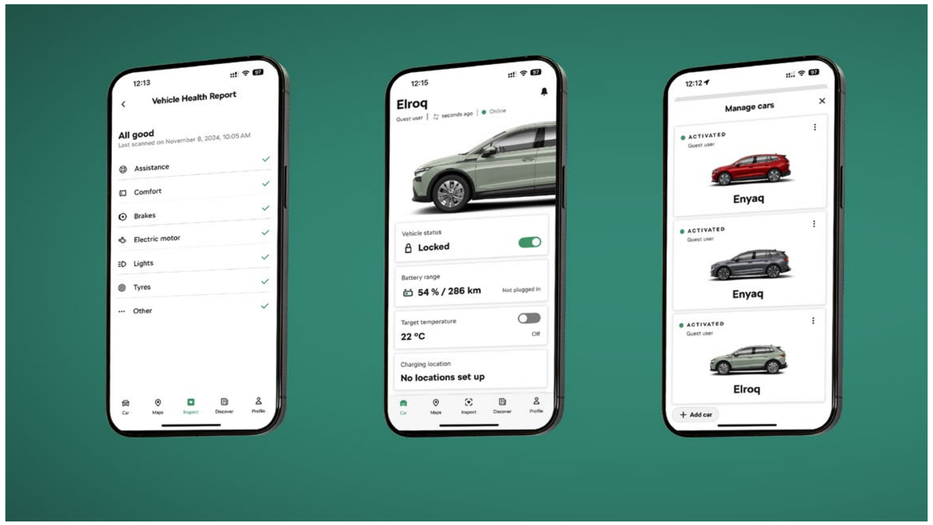
Cars began rolling off the **production line** in 1929, and half a century later, robots were added. Today, Škoda Auto's development is based on cobots (cooperating robots) and other elements of Industry 4.0. In 2024, the Confederation of Industry of the Czech Republic awarded a prize to the project Digitization of Production Control Centers in the Czech plants in Kvasiny, Mladá Boleslav, and Pune in India.

One of the most promising technologies is 3D printing. Škoda Auto has been using it for a long time, for example in its development department, to speed up and reduce the cost of developing future cars. It recently opened a new 3D printing center with 16 printers, many of which run virtually non-stop. Around 15,000 parts are printed here annually for development purposes.

Then there is artificial intelligence. Customers benefit from the widespread use of AI elements not only thanks to the significantly expanded possibilities for vehicle development and testing. The MyŠkoda app includes a **Predictive Maintenance** service. It uses driving data and the Vehicle Health Report service to predict when a service visit is needed. It monitors the condition of the traction battery, 12V battery, air conditioning, and brake pad wear.

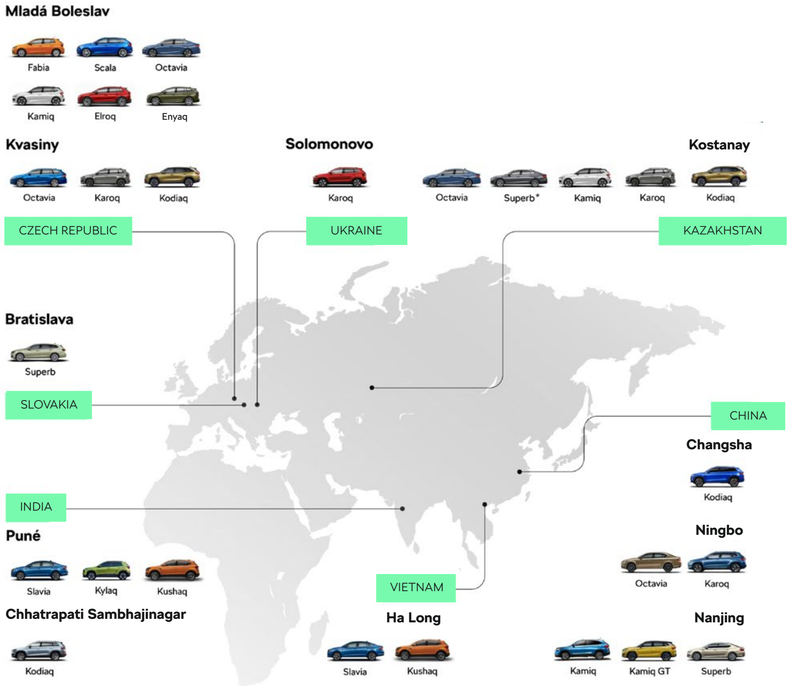
Laura, a digital assistant, is a helpful helper too. The ChatGPT chatbot software allows her to control infotainment, navigation, and air conditioning, as well as answer general questions. However, the AI does not have access to vehicle information or personal data, and all interactions are deleted.





Production plants

The Mladá Boleslav brand quickly penetrated demanding European markets, exporting to all inhabited continents before World War I. Under the wings of the Volkswagen Group, it underwent rapid development not only in vehicle design and production technology, but also in its network of production and assembly plants and distribution infrastructure in dozens of national markets. However, the focus remains on the three Czech plants.



Mladá Boleslav

For 130 years, this city in Central Bohemia has been the seat of the company‘s management and main production plant. The most significant impulses for development were the conversion of the company into a joint-stock company (1907), the entry of strategic partner Škoda (1925), the introduction of the rear-engined Škoda 1000 MB (1964), the integration into the Volkswagen Group (1991), and the energetic development in the field of electromobility (since 2020), when a unique production line for the simultaneous production of cars with combustion and electric engines was launched. In 2024, a total of 575,000 cars rolled off the production lines in Mladá Boleslav, including the Fabia, Scala, Octavia, and Kamiq series, as well as 80,000 Enyaq and Enyaq Coupé electric cars. In 2025, the Elroq model was added to the lineup. Add to that nearly 500,000 EA 211 combustion engines and 355,000 MQ200 manual transmissions.

Kvasiny

Cars have been a tradition in Kvasiny, located in the Hradec Králové Region, since 1934. Originally, they were branded Jawa. After World War II, the representative Škoda Superb model was assembled here, with chassis being transported by train and road from Mladá Boleslav. After the factory was definitively incorporated into the Mladá Boleslav company (1949), attention turned to sports derivatives, including attractive convertibles and coupes.

The balance for 2024: 248,000 Škoda cars, mainly the Karoq and Kodiaq SUVs, with part of the Octavia series production newly transferred here from Mladá Boleslav. In addition, the Karoq‘s „siblings“ are also being produced in Kvasiny: the Seat Ateca and Cupra Ateca.

Vrchlabí

Carriages, buggies, sleighs, and travel luggage – this is how the factory in Vrchlabí at the foot of the Krkonoše Mountains started in 1864. At the beginning of the 20th century, the Peter family business shifted its focus to custom-made car bodies. The company has been part of the Škoda family since 1946, and in 2012 it transformed from car manufacturing to component production. The carbon-neutral plant in Vrchlabí completed 710,600 seven-speed DQ200 automatic transmissions for Škoda cars and other brands in the group in 2024.

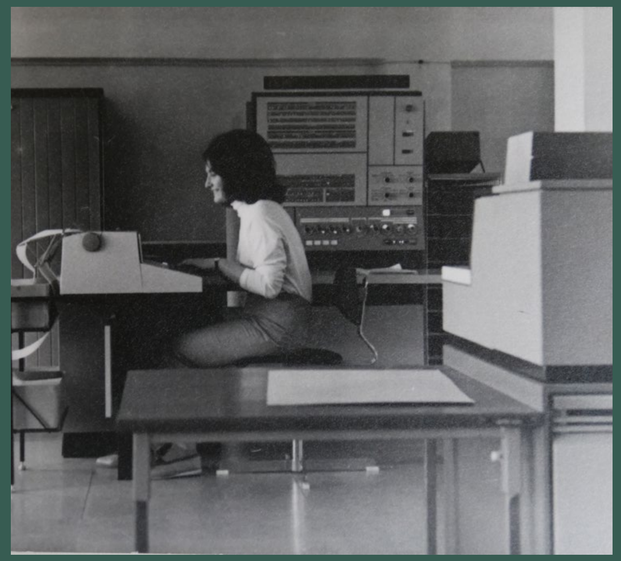
A history of ones and zeros

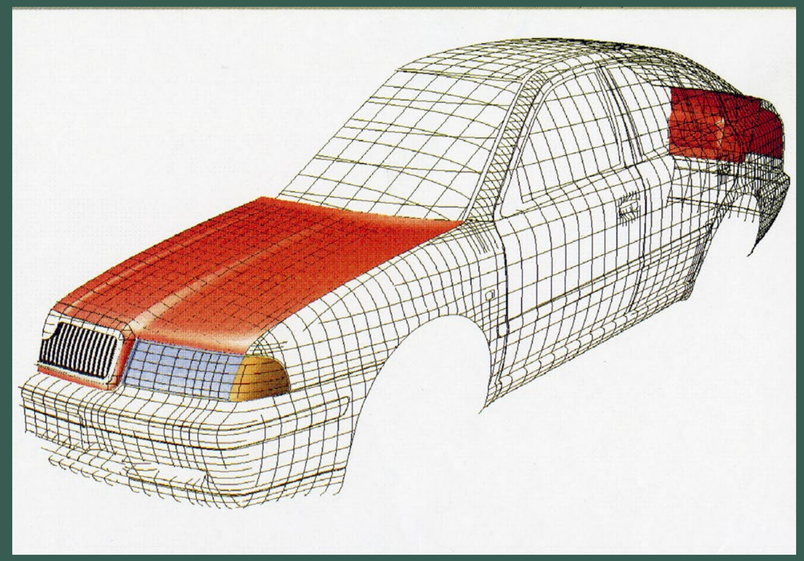
For decades now, it has been impossible to imagine the development of modern cars, or the operation of a car production plant, without the help of computers, which today can even simulate crash tests and generate visualizations that are indistinguishable from real cars. Computers first appeared in Mladá Boleslav in the fall of 1969, when **several cabinets containing an IBM 360/30 mainframe computer** arrived at the gates. More than half a century ago, this was a state-of-the-art computer, which, for example, helped the space center in Houston to perform the first moon landing in the summer of 1969.

Yet it would have taken very little for the computing center to end up with a Russian computer, or even none at all. The car manufacturer managed to sign the order for the American machine just a few days before the invasion of Russian troops in August 1968...

A computer for vegetables

The way in which the AZNP car manufacturer paid for a computer at the end of the 1960s clearly illustrates the absurdity of the era and is also extremely hilarious. The purchase itself had to take place in Vienna, where IBM had a representative office. In order to obtain Austrian Schillings, the car manufacturer first had to export several Škoda 1000 MB cars to Austria in cooperation with a foreign trade company. However, it could not sell them directly to customers, so it exchanged them for vegetables, which it could sell, and with the Schillings obtained, it was finally possible to purchase the much desired computer.





Computers began to play a more prominent role in the technical development and design of cars during the 1980s, when Škoda was developing the Favorit model and later the Škoda Felicia, which was derived from it. The first car from Mladá Boleslav to be developed with extensive use of computers was the first modern generation of the Škoda Octavia series, introduced in 1996.

Although the possibilities were completely different from today, computers were already being used for 3D modeling as well as material calculations and simulations of, for example, crash deformations, vibrations and noise levels. Since then, computer technology has undergone intensive development, and the Mladá Boleslav-based manufacturer has kept pace with the best. Proof of this is the new data center opened in 2019, with what was then the most powerful corporate computer in the Czech Republic, capable of performing 2 quadrillion operations per second. That is almost 67 billion times more than the peak performance of the IBM 360 computer 56 years ago.

Did you know...

...that the processing speed of the first computer at AZNP was 30,000 operations per second, while even the cheapest mobile phone today has many times that performance?

800 kg

was the weight of the first computer in Mladá Boleslav.

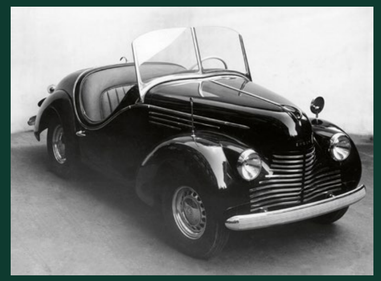
Electricity in our genes

Electromobility is a hot topic in the automotive world today, which doesn‘t mean that this type of drive is something new from a technical point of view. On the contrary. After all, the first fully operational electrified car was built in Mladá Boleslav way back in 1908. František Křižík, at the time the most famous Czech electrical engineer, used a chassis of a Laurin & Klement Type E car and combined its 4.6-liter four-cylinder gasoline engine with two DC electric motors, creating what was actually the first hybrid vehicle from Mladá Boleslav.

The carmaker‘s designers continued to experiment with electric drive. At the end of the 1930s, a purely electric truck with a payload of 3 tons was created and used, among others, by the Pilsen Municipal Brewery to deliver Pilsner Urquell beer to restaurants in Pilsen.

The designers in Mladá Boleslav returned to electromobility in the early 1990s, when around 100 Škoda Eltra cars were manufactured. This model, based on the Škoda Favorit and Škoda Pick-up, was primarily intended for the Swiss market. Its batteries were good for a range of 80 km, and with a 15.4 kW motor it could reach a maximum speed of 80 km/h.

The path to the modern era of electromobility, in which Škoda Auto already fully realized its technical potential, led through 17 prototypes of the Škoda Octavia Green E Line from 2011. They were powered by an electric motor with an output of up to 85 kW, which drew energy from a battery with a capacity of 26.5 kWh. The test cars had a range of up to 150 kilometers and reached a top speed of 135 km/h.



Škoda Puck: Electric car for children

An interesting foray into the world of children's toys was the Škoda Puck mini roadster, which was manufactured in Mladá Boleslav between 1941 and 1942. The toy car was surprisingly advanced in technical terms – it was powered by a Scintilla electric motor, which could run for two hours on a set of Varta-Ferak batteries. The car, which was even produced in two sizes, had fully working lights, speedometer and suspension on all wheels. Its maximum speed was 12 km/h.

The actual electrification of model portfolio took off in 2019 with the introduction of Škoda Citigo-e iV and Škoda Superb iV production models. A major milestone came just one year later in the form of the Škoda Enyaq, which was the brand's first vehicle designed from the scratch as an EV and used the Volkswagen Group's MEB platform. Success was not long in coming, and the Enyaq became one of the best-selling electric SUVs in Europe, further strengthening its position after a major update this year.

The brand's second all-electric model series, the Elroq, was also a hit for Škoda. This SUV, which falls under the Enyaq model in the portfolio, was introduced at the end of 2024. In April and October this year, the Škoda Elroq became the best-selling electric car in Europe and has since dominated various European markets, such as Denmark and Austria. Its technical qualities and high utility are also appreciated by experts – the Elroq was among the finalists of the 2026 European Car of the Year award and won the German Car of the Year title in compact cars class, which also secured its place in the grand finals.

Thanks to its two fully electric model ranges, Škoda Auto has a very good market position, which will be further strengthened by the small urban crossover Škoda Epiq and new models based on the attractive Vision 7S and Vision O concepts.

Milestones in the brand‘s technical development

It may sound like a cliché, but the emphasis on technical innovation in vehicle design and the introduction of progressive and efficient production technologies has been part of the Mladá Boleslav brand‘s DNA since the 19th century. Thanks to this approach, L&K/Škoda has managed to do much more than „just“ survive in a highly competitive industry and during periods of political and economic turbulences. Its share of global automobile production has grown more than tenfold over the past century. Just compare the 449 cars produced in 1924 with last year‘s 925,000...

Let‘s recall at least the most important innovations.

Bicycles

Václav Laurin and Václav Klement start their joint venture with a wide range of bicycles. Waterproof bearings contribute to high reliability.

1895

Engines from Mladá Boleslav

Development and production of combustion engines, single- to four-cylinder gasoline engines for L&K Slavia motorcycles, begins. Their design is among the best in the world.

1899

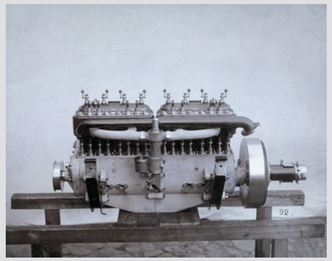
The first automobile

The L&K Voiturette A with a 1-liter two-cylinder petrol engine proves itself not only in city traffic, but also in the Alps thanks to its climbing ability and efficient brakes.

1905

The luxurious L&K FF eight-cylinder engine

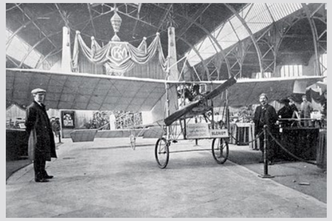
A Central European first and one of the first automobiles with an inline eight-cylinder engine in the world.



1907

The first aircraft engine and pilot

A special Laurin & Klement four-cylinder engine powers the first aircraft to successfully take to the skies on the Czech territory.



1910

King of the Alpine Rally

Its dynamic performance and exceptional reliability are confirmed by five consecutive victories in the extreme Alpine Rally.

1914

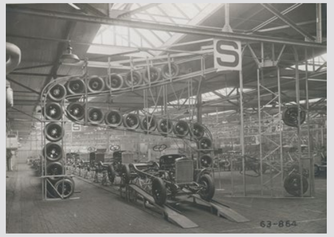
L&K becomes Škoda

The Pilsen-based engineering and arms manufacturer Škoda supplies cutting-edge materials and technologies and becomes the new owner of the L&K car company. The Škoda logo appears on the cars and heavy investment is made in modern production.

1925

Efficient assembly line production

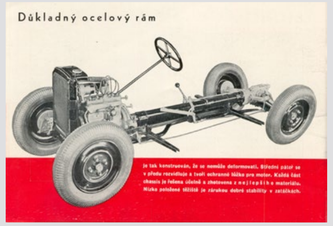
The brand emerges from the global economic crisis stronger than ever, thanks to assembly line technology, model range standardization, and synergies within the Škoda Group.



1929

A strong generation with a rigid backbone

The new Škoda Popular, Rapid, Favorit, and Superb models, with a backbone chassis frame and independent suspension on all wheels, are lighter and more agile than their conventional competitors.



1934

Nationalization of the car manufacturer

After the war, the Škoda car manufacturer is nationalized. However, during the restructuring of domestic industry, after a series of upheavals, it is given the green light as the only car manufacturer capable of efficient mass production.

1945

All-metal Škoda 1200

Another technological revolution: traditional wooden-framed bodies give way to stiffer and safer all-metal ones.

1952

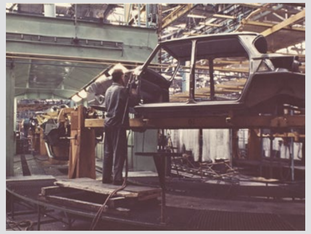
The Octavia: a family ideal

One of the most important models is the Škoda Octavia, a family car that has enjoyed a number of sporting successes and is the basis for derivatives for overseas markets.

1959

A new plant for the “Embéčko”

New technologies are introduced in Mladá Boleslav, including unique aluminum die casting. The Škoda 1000 MB (called “Embéčko“ for MB or Mladá Boleslav) with a rear engine and self-supporting body is one of the best in the one-liter category.



1964

100,000 Škodas per year

Production exceeds the magic threshold for the first time. The production equipment combines in-house solutions with technology from Western specialists.

1968

The sporting legend “Ereso”

The competitiveness of the original concept is confirmed by the racing and competition Škoda 130 RS called „Ereso“ for RS or rally sport, which was at the top of its class in the 1970s and 1980s.

1975

Front-wheel drive

The modern production line rolls out the variable hatchback Škoda Favorit with a transverse engine and front-wheel drive. For the carmaker, it is a legendary game changer.

1987

Moving forward together: Škoda + Volkswagen

Restart: strategic partner Volkswagen Group brings technology and investment while maintaining the brand, in-house production, and development.

1991

Victorious run at the Monte Carlo Rally

The Favorit wins its class at the Monte Carlo Rally four times in a row (1991–1994), and Škoda wins the FIA F2 category cup (1994).

1994

Bestseller Octavia

The first Škoda model developed entirely within the VW Group, a lower-middle-class liftback (later also a station wagon) on a shared A4 platform.

1996

The flagship Superb

The first modern Superb has features that were luxurious at the time, such as navigation with a color display and automatic air conditioning.

2001

10,000,000th Škoda

During 15 years under the wings of VW, annual production volume grew from 172,074 to 556,274 Škodas. The company celebrates the ten millionth car in its history.

2006

SUV offensive

Following the March premiere of the Vision S concept car in Geneva, the seven-seater Škoda Kodiaq is unveiled, marking the beginning of a successful SUV offensive.

2016

20,000,000th Škoda

It took over 80 years to produce the first ten million Škoda cars, but thanks to global expansion, it took only 11 years to double that number!

2017

The dawn of the electric era

Traction batteries for purely electric models from Škoda and other brands in the group, as well as plug-in hybrids such as the Škoda Superb iV, are being produced in Mladá Boleslav.

2019

The Škoda Enyaq iV electric car

The first Škoda on the modular electric vehicle platform (MEB): rear-wheel or all-wheel drive, three battery sizes, range up to 500 km.

2020

A year of anniversaries and further development

A year of anniversaries and further development
Škoda Auto celebrates its 130th anniversary. The new Elroq model becomes a star on the European market. Global expansion continues, including in ASEAN markets.

2025

Respect through technology

Technical expertise

Under the wing of the Volkswagen Group, Škoda Auto's technical development has come a long way and has long since ceased to focus solely on solving local design and mechanical challenges. On the contrary, over the past decades, it has proven itself many times on the international stage. Renowned Czech innovative approaches, new ideas, diligence and perseverance, technical skill and flexibility are the reasons why a team of more than 700 developers in Mladá Boleslav is now responsible for strategic global projects within the Volkswagen Group.

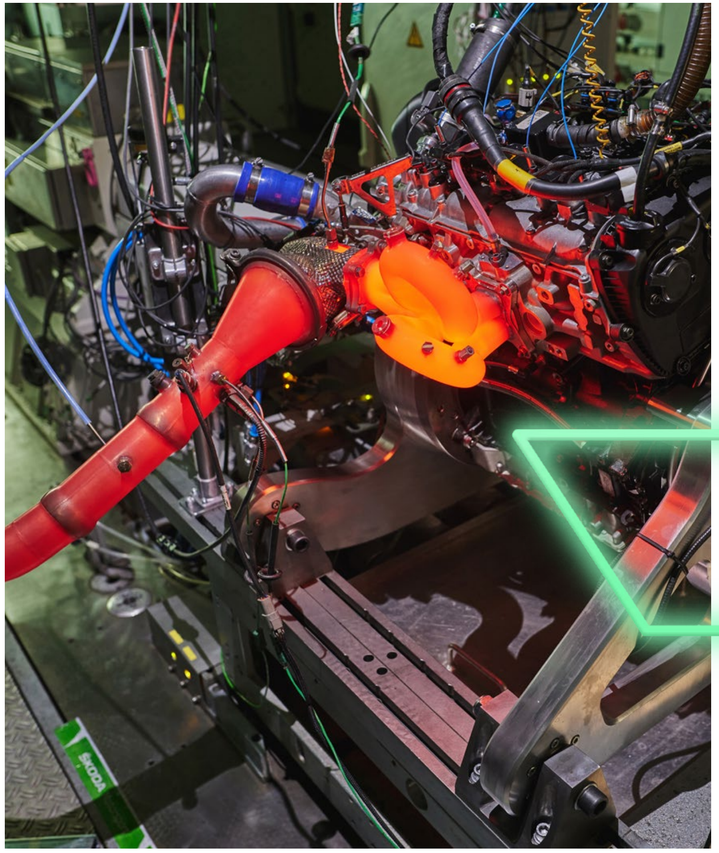
After all, the tradition of engine production in Mladá Boleslav is even longer than that of car production itself. The first single-cylinder engine premiered in Mladá Boleslav in 1899 and was designed for the Slavia motorcycle. It is precisely this renowned Czech expertise in automotive design and mechanics that has earned the Škoda brand high international respect and attracted significant investment from the Volkswagen Group in the Czech Republic.

In 2014, for example, a brand new, **state-of-the-art Engine Center** with 21 test benches was opened in Mladá Boleslav by an investment of around €45 million. Incidentally, the long history of testing engines on a dynamometer is documented by an archive photograph from 1908, which shows its existence at the Laurin & Klement factory.

In the spring of 2017, Škoda opened a new **Emission Center South** next to its Technical Development facility in Mladá Boleslav, which has three test boxes for testing both combustion engine vehicles and electric cars. In 2021, another huge investment (almost €22 million) started the construction of a new Simulation Center, which opened last year. Demanding tests of vehicles and components are carried out there in accordance with current and future legislative standards of the European Union, India, China, Brazil, and other regions.

This has further increased the importance of the Mladá Boleslav-based carmaker for the Volkswagen Group. For the Škoda brand, the opening of the **Simulation Center** represented another step in confirming its **global responsibility for the development of the Group's MQB27 platform.** Since 2021, Škoda Auto has been globally responsible for the Volkswagen Group's MQB-A0 global platform, which is designed for the entry-level models of the Škoda and Volkswagen brands in markets such as India, Africa, ASEAN countries, and Latin America.

In 2023, Škoda was rewarded for its exceptional competence and technical expertise in the development of powertrains by taking over the complete development of the EA211 series of gasoline engines, including related systems such as air intake, exhaust, cooling, and thermal management for the entire Volkswagen Group. In addition, the Czech car manufacturer is also responsible for the development of mechanical transmissions and applications of the DQ200 automatic transmission.



50,000 liters

This is the capacity of the fuel tanks located next to the Motor Center building, which can store up to six types of fuel (gasoline, diesel, CNG, LPG, ethanol, and racing fuel).

1992–2025: A successful journey to the global elite

After Škoda Auto became part of the Volkswagen Group in 1991, it began a dynamic transformation that turned it from a local car manufacturer into a globally respected brand. After more than three decades of modern history, Škoda Auto plays an irreplaceable strategic role within the Volkswagen Group and is responsible for a number of key projects for the further development of both the brand itself and the entire group. This period can be described without exaggeration as the most successful in the brand's history, and although we tend to perceive the word „milestone" in a more distant historical context, the past 35 years have been full of significant events that have fundamentally shaped the brand and determined its future direction.

After the fall of communism, it was first the plant itself that required huge investments in modernization and expansion of production. Škoda soon became the most important Czech company, a respected employer, a company that undoubtedly helps the Czech Republic gain visibility on the world map. After all, who would have thought more than thirty years ago, how many model ranges the Mladá Boleslav-based manufacturer would offer today, where in the world it would produce its cars, and how successful its models would be with customers? Whole 130 years since its foundation, Škoda Auto is on the threshold of a new era, and its outlook for the future has never been better or clearer.

Did you know...

...that the first mass-produced car to bear the RS (Rally Sport) designation was the **Škoda Octavia in 2000**, when it was fitted with a supercharged 1.8 Turbo 20V (180 hp) gasoline engine and a number of design and technical modifications that significantly enhanced its driving dynamics? This coincided with the brand's entry into the World Rally Championship with the Octavia WRC.

1996

ŠKODA OCTAVIA AS A SYMBOL OF SUCCESSFUL TRANSFORMATION

The **first modern generation of the Octavia** model made a significant contribution to restoring the brands's reputation and competitiveness. Technically, it used a modern platform and a wide range of Volkswagen Group engines, which represented a significant technological leap forward. As a result, it became a symbol of modernization and heralded a new era for the brand. Its popularity in Europe and elsewhere in the world contributed significantly to Škoda Auto's economic growth and strengthened its position within the Group.

2000

VW BECOMES THE SOLE OWNER OF ŠKODA AUTO

On May 30, 2000, the nearly ten-year process of Volkswagen's gradual takeover of Škoda Auto was completed when it acquired 100% of shares in the Mladá Boleslav-based company. It all began in April 1991 with the transfer of an initial 31% stake from the state to VW, followed by a rise to 60,3% in December 1994 and 70% a year later.

2003

SIMPLY CLEVER MAKES ITS DEBUT

Now an inherent part of all Škoda cars was first officially used as a slogan in connection with the Škoda Roomster concept car, which was presented at the Frankfurt Motor Show. Based on the positive response, Škoda began using the slogan „**Simply Clever**" as an integral part of its marketing and product identity, describing a set of features that make everyday life with a car easier and more enjoyable for drivers. To date, the range of these elaborate solutions has grown to more than 60.

2016

ŠKODA KODIAQ LAUNCHES THE SUV OFFENSIVE

Škoda first ventured into the SUV category in 2009 with the Yeti model, but **it was the Kodiaq** that became the truly groundbreaking vehicle that marked the beginning of the brand's planned strategy to make it in the growing SUV segment. It was followed a year later by the Karoq, then the urban focused Kamiq in 2019 and the all-electric Enyaq in 2020. This year, the Elroq electric car was added to the European model range. In addition, Škoda offers other SUVs on non-European markets, such as the popular Kushaq model in India.

2020

ŠKODA ENYAQ LAUNCHES THE ELECTRIC ERA

Electromobility is one of the key pillars of Škoda's future development, which got off to an extremely successful start with the **Enyaq iV** – the first all-electric car from Mladá Boleslav built on the Volkswagen Group's MEB platform. Two years later, the attractive Enyaq Coupé body variant followed, including an RS version. In 2024, Škoda Elroq expanded the electric portfolio, and this year saw a significant modernization of the Enyaq model range. Next year, the range will be further strengtened with an affordable urban electric SUV called the Epiq, and further new developments are also planned...

2024

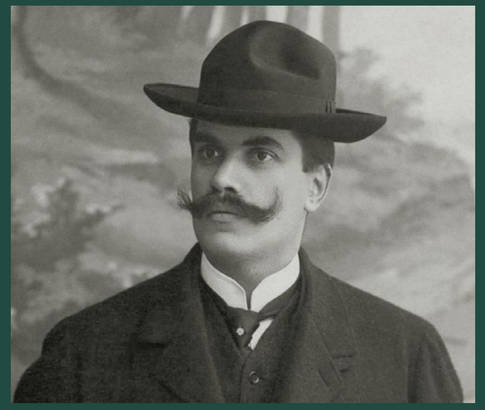
ŠKODA ELROQ AND THE NEW MODERN SOLID DESIGN LANGUAGE

At its annual conference in 2022, Škoda Auto announced that it was preparing a completely new design language. Two years later, it was unveiled for the first time in the new **Škoda Elroq**, followed in 2025 by the **updated Enyaq series**. Modern Solid is characterized by key values of the Škoda DNA, such as robustness, functionality, and authenticity. It is typically minimalist in appearance, combining elegance and practicality while meeting the demanding aerodynamic requirements.

Famous designers

From the very beginning, Laurin & Klement‘s openness was also evident in its personnel policy. The company‘s founders, ethnic Czechs Václav Laurin and Václav Klement, gradually assembled a top-notch team of colleagues, diverse in terms of nationality and social status: from workers to economists to technical experts. Professional expertise and enthusiasm were the deciding factors, not nationality. The international character of the Škoda car manufacturer was significantly enhanced after the restoration of democracy in the country in 1989 and even more so with the brand‘s integration into the Volkswagen Group (1991).

Let us recall at least a few key figures in technical development.



Václav Laurin
1865–1930

A mechanic from Turnov, an intuitive engineer without academic education. He set the direction for the brand‘s design development. He led the development of the first L&K bicycles, motorcycles, and cars, and even devoted his Sunday trips with his family to testing new models. As a consultant, he helped his successors practically until the very end of his life.

Otto Hieronimus
1879–1922

A talented chief designer, he was behind the greatest sporting successes in the period before World War I and was himself one of the best racers of his time. Fascinating models such as the L&K FCR date back to his era. In 1910, he designed a four-cylinder aircraft engine and became the first pilot on Czech territory.

Karel Hrdlička
1865–1930

He studied mechanical and electrical engineering, was a wagon designer, and head of the human resources department at Škoda Works. From the late 1920s, he was responsible for the fundamental modernization and expansion of the Mladá Boleslav car factory, including the introduction of a new generation of Popular, Rapid, Favorit, and Superb cars.

Vladimír Matouš
1896–1963

From 1928, he led the design of passenger and light commercial vehicles. He emphasized quality, reliability, and component standardization when introducing assembly line production, as well as when transitioning to a backbone frame and independent suspension on all wheels. Before retiring in 1959, he brought models such as the Tudor, Sedan, Spartak and Octavia into production.

Josef Velebný
1906–1989

He started in Mladá Boleslav in the summer of 1925, and from 1946 he headed the body design department and was involved in the creation of a series of timelessly elegant Škoda cars from the 1940s to the 1960s. He participated in the transition to all-metal and later fully self-supporting bodies and helped introduce the production of derivatives of the Octavia series: the New Zealand Trekka and the Pakistani Skopak with fiberglass bodies.

Petr Hrdlička
* 1934

The son of a First Republic car factory director, he started as apprentice number 9809 (specializing in machine fitting and auto mechanics). He later gained recognition as an expert on hypoid gear trains, and in 1963–1964 he worked in Mladá Boleslav as the chief foreman of the gear factory. The project he led for a completely new generation of Škoda Favorit vehicles (1987) and the establishment of cooperation with a number of foreign companies contributed significantly to the development of the car manufacturer and its later integration into the Volkswagen Group.

Martin Hrdlička

* 1969

The son of Petr Hrdlička began his career in 1993 as a brake system designer, became head of powertrain assembly in 2001, head of the chassis department in 2006, and has been responsible for the development of Škoda chassis and powertrains since March 2008. His team is also responsible for the development of certain series of combustion engines, transmission types, brakes, and other components shared by the group's brands within the VW Group.

Wilfried Bockelman

1942–2017

The German engineer and manager had been in contact with the Czech car manufacturer since 1985, when he helped adapt the carburetor for the Favorit model. Between 1995 and 2002, as head of technical development at Škoda Auto, he fundamentally supported the expansion of the brand's independent technical team. He led the development of the Fabia and Superb models, was instrumental in preserving and developing the plant in Kvasiny, and returned the Škoda brand to the world of rallying.

A breeding ground for talent

Qualified and motivated employees are one of the pillars of success. An industrial school training specialists in engineering fields was founded in Mladá Boleslav in 1867, and Škoda Auto University is celebrating its quarter-century anniversary this year. In March 2024, the company's new headquarters, Laurin & Klement Campus, was completed in Mladá Boleslav.

From rallying to everyday cars

The tradition of involvement in motorsport goes back to the very roots of Škoda, hence are we about to celebrate its 125th anniversary in 2026. Successes on the racetrack did not only help to achieve a reputation for robust and reliable cars, but the experience gained was also used **in the design and engineering of production cars.**

Škoda Enyaq RS Race

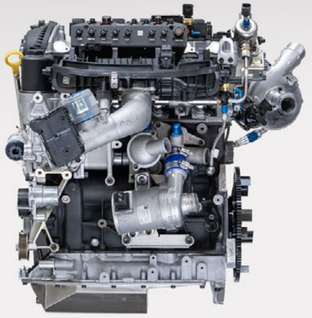
The convergence of the world of motorsport and everyday serial production is moving to a whole new level with the advent of electromobility. Proof of this is the **Škoda Enyaq RS Race concept**, which represents another important step towards the development of electrified motorsport and a sustainable future.

Sharing of knowledge between Škoda Motorsport engineers and developers of production models is still very intense today, performed on an nearly daily basis. After all, the **Škoda Fabia RS Rally2**, currently the most successful rally car in the world, must use clearly specified production parts in accordance with the technical regulations of the International Automobile Federation (FIA). Ultimately, the approximately 3,000 components that make up the rally car from Mladá Boleslav are a mix of standardized parts, parts designed specifically for racing purposes, and original or modified production parts.

The long-term high loads during races provide designers with a unique source of knowledge that can be applied in the design of technical solutions for production cars. Here are some examples of areas where the world of Škoda Motorsport intersects with production cars leaving the assembly line, and where ordinary motorists also benefit from the technical expertise gained.

200

The Škoda Motorsport customer program achieved another extraordinary success this year when it **handed over its 200th Škoda Fabia RS Rally2** car to the Czech dealer team Samohýl Škoda Team.



Turbocharged, four-cylinder, direct-injection engine	1,620 cm^3
Max. power	214 kW*
Max. torque	430 Nm*

The series-production engine, from which the racing engine of the ŠKODA FABIA RS Rally2 is derived, is an EA 888 Gen3 Lk1, 2.0 TFSI turbocharged petrol engine with a 140/145 kW output.

The EA 888 engine series is used in the brand's RS models, among others.

The engine in the rally car differs in the following ways:

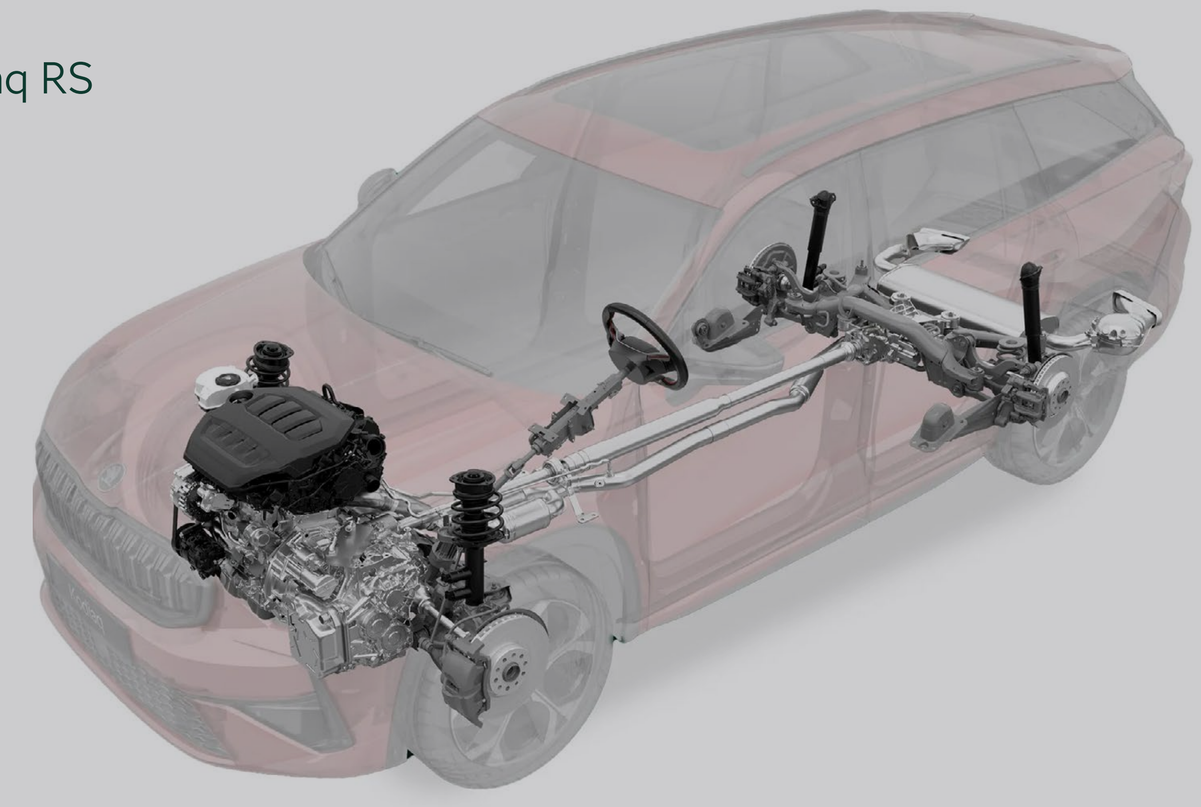
- Engine displacement reduced from 2.0 l to 1.6 l
- Optimised bore stroke ratio
- Improved thermodynamics (inlet and exhaust ports, combustion chamber, piston), variable valve timing for exhaust and inlet, completely redesigned lubrication system
- Optimised exhaust system with new turbocharger
- Optimised inlet system with new airbox, filter unit and intercooler
- Brand-new cooling circuit with enhanced cooling performance
- New electronic actuators and engine management software

* max power/torque value depends on fuel used

Engine

The turbocharged 1.62-liter engine that powers the Škoda Fabia RS Rally2 racing car is based on the 2.0 TSI (EA 888) engine range.

Kodiaq RS



All-wheel drive

The technical experience gained while managing the traction of the rally car on a wide range of surfaces is also used by the brand in its production models equipped with all wheel drive.

Škoda RS models

New high-tech design solutions, which Škoda Motorsport is constantly developing and testing on rally tracks around the world, usually appear for the first time in standard road cars in **the top-of-the-range RS sports variants.**

Body

Approximately 55 percent of the racing version's load-bearing structure is identical or only slightly modified in comparison to the production Škoda Fabia. The knowledge gained in the field of aerodynamics is also put to excellent use in the development of new production cars.

Škoda Muzeum

A repository with the scent of patina

The Škoda Museum impressively presents the story of the historical development of the company, founded in Mladá Boleslav before Christmas 1895. In addition to the representative **permanent exhibition**, located on the original production premises from the early 20th century, covering an area of 1,800 m², Škoda Museum also features a cross-sectional exhibition entitled **130 Years of Škoda Auto**, which will run until January 11, 2026. Visitors also enjoy the adjacent depository of prototypes and sports cars.

From December 1, 2025, it is also be possible to take a guided tour behind the scenes of the Škoda Museum – to another part of the **depository** with 23 exhibits. These are mainly presented in their original or „barn find“, i.e., as yet unrenovated, condition. These unique vehicles, smelling of patina, date from the period 1913–1948 and include models from both Laurin & Klement and Škoda brands. In addition to a brief description, detailed information and interesting facts can be obtained by scanning a QR code.

The hall itself, which now serves as a depository, was established in 1907 as a forge, complete with a large hammer for the mass production of large metal components and an engine brake for measuring the performance and behavior of the power unit before it was installed in the chassis.

The gradual opening of the „garage-style“ storage areas is part of a long-term plan to expand and enhance the Škoda Museum‘s range of services and encourage repeat visits.

Step by step

In 2026, further spaces will be opened, this time featuring Škoda prototypes, design studies, and concepts from the 1950s to the present day.

Celebrating 130 years of rich history, innovative approaches and a vision for the future of the company.