

Audi Tradition

Anniversary Dates 2022





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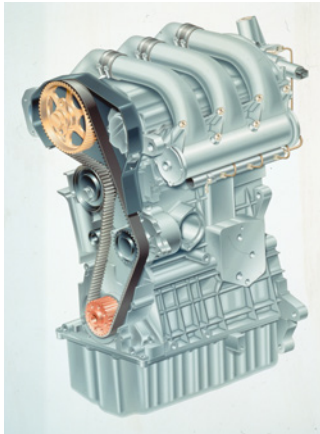


25
years

Al₂ and Audi A2 prototypes

In 1997, Audi unveiled the Al₂, the concept prototype of a small aluminium car, at the International Motor Show in Frankfurt. In collaboration with the American aluminium manufacturer Alcoa, Audi had developed a self-supporting aluminium body with a substructure comprising aluminium castings, connecting nodes and extruded profiles. This design was patented as the Audi ASF (Aluminium Space Frame) and used in the A8.

The fabric soft top with a plastic rear window could be rolled up forwards electrically; after detaching a bridge element between the rear lights, the rest of the tailgate could be lowered into the bumper by remote control, leaving clear access to a load platform measuring 160 x 95 cm. In contrast to the four-door prototype, the Al₂ open end version remained a unique specimen.



In 1999, the “Audi A2” production model made its first appearance at the International Motor Show. Series production at the Aluminium Competence Centre in Neckarsulm began in June 2000. The A2 was the first all-aluminium compact car in recent automotive history. Previously only the French make Panhard had gained any experience of production in this area up to the mid-1950s.

The Audi Al₂ open end made its debut at the Tokyo Motor Show in autumn 1997. The two-door version of the Al₂ looked great with its variable plateau concept and fully retractable side windows.





25
years

Market launch of Audi S4 (B5)

The Audi A4 saloon was launched on the market in November 1994. A year later there was also an estate version of the successor to the Audi 80. The fifth generation of the B-series was powered by four and six-cylinder petrol engines, along with the tried-and-tested four-cylinder TDI. A sporty version in the style of the Audi S2 did not come along until autumn 1996.

The top-of-the-range Audi S4 was finally available from **September 1997**. Equipped with a 195 kW/265 hp V6 biturbo five-valve engine, the saloon and Avant were only available with permanent all-wheel drive.

Modified bumpers with enlarged air intakes and side skirts painted in the same colour as the car made what was the sportiest A4 to date stand out from its less powerful basic versions. Six-speed gearboxes, a sports chassis and 17" wheels were all standard features. From September 1997 until production ended after the 2001 plant holidays, 3,939 S4 saloon cars and 10,156 S4 Avant rolled off the production line.





25
years

Market launch of Audi A6 (C5)

Audi presented the new A6 in March 1997 at the Geneva Motor Show. The saloon was available from dealers by May 1997, with the Avant appearing in March of the following year.

The fifth generation of the C-series – the former Audi 100 – polarised opinion with its design, which represented a radical departure from the company's previous standard line. In the years which followed, the body with the domed roof and lots of rounded sections picked up several design awards, including in Tokyo

the “Good Design Gold Prize” and the iF winner of Industrie Forum Design Hannover as “Best of Category” for excellent design. As the clear winner in the premium class in 1997, in March 1998 the A6 was also awarded the “Golden Steering Wheel” by the newspaper “Bild am Sonntag”.

Up until production ended, of the saloon in March 2004 and the Avant in February 2005, a total of 1,010,518 Audi A6 C5 rolled off the production line.





25
years

25th anniversary of death of Ludwig Kraus

Ludwig Kraus was born on 26 December 1911 in Hettenhausen near Pfaffenhofen. After studying mechanical engineering, in 1937 he joined Daimler-Benz AG as an engine designer.

As part of a plan to modernise the products at the then subsidiary Auto Union GmbH, Kraus was posted to Ingolstadt where from 1 October 1963 he was the director in charge of vehicle development. After Auto Union GmbH was acquired by Volkswagenwerk AG in December 1964, Ludwig Kraus joined the management team of the Ingolstadt-based company in 1965.

His biggest achievement was developing a modern range of Audi vehicles which were launched as the successors to the DKW models with two-stroke engines from the end of 1965. The Audi 60/Super 90, Audi 100, Audi 80 and Audi 50 model series which he created blazed the trail for the company's further development. Following the merger with NSU Werke AG to create Audi NSU Auto Union AG, from 1 September



1969 Kraus was appointed as the board member with responsibility for technical development. Ludwig Kraus retired on 31 December 1973. Between 1976 and 1985 he was a member of the Supervisory Board of Audi NSU Auto Union AG.

Ludwig Kraus died on **19 September 1997**.





30
years

First Audi Avant in the B-series

The Avant version, which was introduced with the second-generation Audi 100, gets its name from the Italian word “avanti”, which means “forwards”.

The first Avant model in the lower mid-range class was launched on the market in **September 1992** with the Audi 80 Avant (B4 series).

The new model was available with nine different engines ranging in power from 90 to 315 hp and became a best-seller.

With the 80 Avant, Audi succeeded in making a strong entry into the lifestyle estate car market segment. Production of the Avant ended in September 1995, six months after the Audi A4 was launched on the market.





40
years

Third-generation Audi 100

When Audi NSU Auto Union AG presented a futuristic research car at the International Motor Show in Frankfurt in autumn 1981, it was not just insiders who clearly recognised that this heralded the birth of a new generation of Audi models. The extensive development work was then done on the third-generation Audi 100 (internal name C3), which was launched on the market in **autumn 1982** and whose design would pave the way for subsequent generations of Audi cars. With this model, the Ingolstadt-based company once again demonstrated

its innovative strength. Consistent lightweight construction and in particular the sensationally low drag coefficient of $c_W = 0.30$ made the new Audi 100 synonymous with an advanced design. “When it comes to aerodynamics, the new Audi 100 simply outclasses the rest of the cars in the world,” wrote Auto-Zeitung magazine. Audi NSU achieved a great success with the “drag world champion”, which was also reflected among other things with numerous international awards.



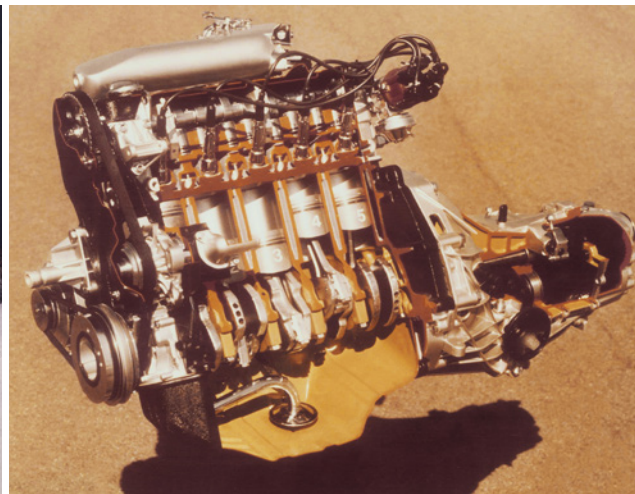


45
years

Five-cylinder engines at Audi

The second-generation Audi 100 (internal name C2), which was first unveiled in August 1976, was launched on the market in April 1977 with a 100 kW (136 hp) five-cylinder injection engine. This newly developed unit was a new phenomenon in the history of automotive construction and it sparked great interest.

From April 1978, this engine was also offered in an 85 kW (115 hp) carburettor version. The five-cylinder engine appeared in the new Audi 200 with an exhaust turbocharger (125 kW/170 hp) in 1979. In the years which followed, Audi's successes in motorsport were based on this turbocharged engine.





45
years

First Audi 100 Avant (C2)

Within the second series of the Audi 100 model range, in **August 1977**, alongside the two-door and four-door saloon, the Audi 100 Avant also appeared as a third design. It was the result of a new, modern vehicle concept. It was characterised by its sporty hatchback resembling a coupé.

The model was ahead of its time, had a body shape that was both visually and functionally progressive, and heralded a paradigm shift from the estate as a commercial vehicle for lugging loads to an automobile with a sporty focus for people to use at their leisure. The design-savvy customers soon determined that the compelling line of the sporty five-door car set the benchmark for a new lifestyle identity in the high-end saloon segment.





50
years

First Audi 80 (B1)

It was designed to be “modern, but not trendy”, a grounded and affordable family car. Audi chief engineer Ludwig Kraus and Volkswagen AG, which was the new parent company, agreed on this approach at the end of the 1960s. The Audi 80, known internally as “B1”, was a great success for the company in 1972.

As with racing car design, chief development engineer Kraus had his staff examine where extra weight could be saved for every single part. The unusually light-weight Audi 80 was a big hit with its sporty driving

characteristics and low fuel consumption – and was therefore the perfect car to own during the oil crisis, which began in 1973.

The designer Hartmut Warkuss helped to craft the design in the style of the new objectivity of the 1970s. He was promoted to the role of “head of the main stylistics department” in 1976 and shaped the Audi design for several generations of models in the B, C and D series.





50
years

Dr. Ferdinand Piëch joined Audi NSU Auto Union AG

Ferdinand Piëch was born on 17 April 1937 in Vienna. After completing a degree at ETH Zurich, he began his career in 1963 as a person responsible for testing engines at Dr.-Ing. h. c. F. Porsche KG. In 1966 he was promoted to Head of Testing, and in 1968 he became Head of Technical Development.

He was appointed Technical Director at Porsche KG in 1971. In 1972 a shareholder resolution decreed that no more family members should be employed in the family's companies, which resulted in the Porsche and Piëch family members leaving the company.

In 1972 Dr. Piëch joined Audi NSU Auto Union AG as the senior head of department for special assignments in technical development. He became Head of Technical Development in 1974. The following year saw him appointed to the company's board, and in 1988 he was appointed CEO of AUDI AG.

Dr. Piëch died on 25 August 2019 in Rosenheim.





55
years

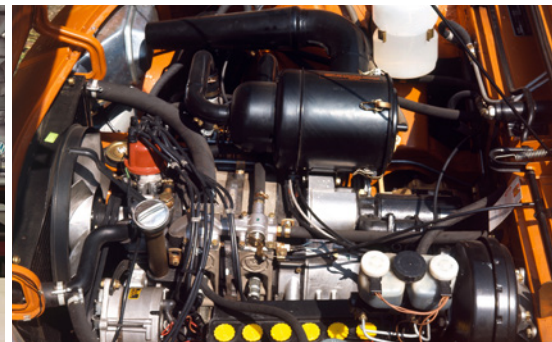
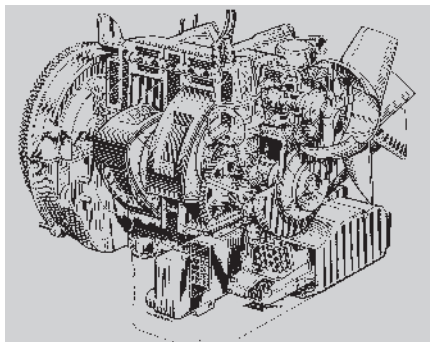
Unveiling of NSU Ro 80

Ten years after the rotary piston engine made its first revolutions and precisely ten years after it started producing cars again, NSU presented the NSU Ro 80 at the International Motor Show in 1967. It was the world's first production car with a twin-rotor Wankel engine – and five years of development work lay behind it.

The advantages of this Wankel drive unit were lower weight, less space required, low vibrations and fewer components were required than with a conventional reciprocating piston engine with this engine power.

The four-door saloon set new standards for roadholding, safety, comfort and performance. With the futuristic wedge-shaped body line, designer Claus Luthe created a milestone in automotive design whose drag coefficient was 0.35.

The company attempted to attract customers for the NSU Ro 80 with the slogan “Vorsprung durch Technik”, which was later also used to advertise Audi vehicles. The car was manufactured at the Neckarsulm plant from 1967 to 1977. The Ro 80 was the first German automobile to receive the accolade of “Car of the Year 1967”.





65
years

NSU resumed car manufacturing

In 1955 NSU Werke AG was the world's largest manufacturer of motorcycles, yet there were clear signs that the motorcycle market was facing a major crisis. Increasing wealth following the German economic miracle had raised the aspirations of buyers. Most people now wanted more than just a motorcycle for a set of wheels; car driving was the future.

This was why at NSU in Neckarsulm the decision was made to start manufacturing cars again after a break of almost thirty years. The aim was of course to produce a small car, designed for average earners and created to enable motorcyclists to switch to driving a car. At the Frankfurt International Motor Show in **September 1957**, the public finally got a glimpse of the NSU Prinz, a smart little car for four people with an air-cooled two-cylinder engine in the rear which produced 20 hp with a capacity of 583 cc. Not least thanks to the outstanding publicity it received, the NSU Prinz was a resounding success.





65
years

First NSU rotary piston engine

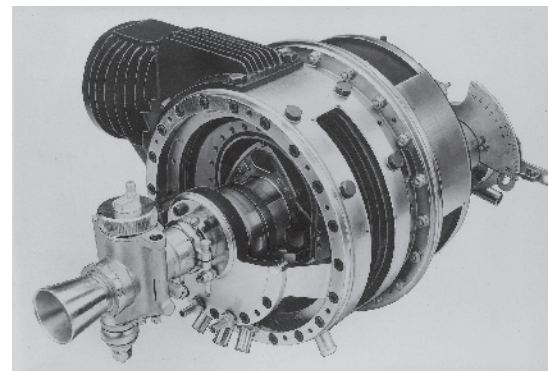
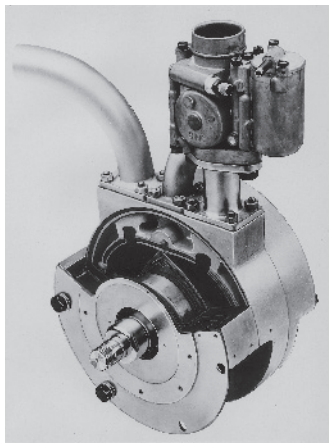
The **1 February 1957** was a memorable day for the small team of specialist engineers at NSU. The team in Neckarsulm had been working for a number of years on developing a completely new engine concept: an engine that developed its power not via reciprocating pistons, but via a “triangular” rotating rotor.

The idea stemmed from the self-taught engineer Felix Wankel, who with NSU had found a partner to implement his idea. That 1 February was the day on which the prototype of the “Wankel engine” completed its first test run on the engine test bench.

The engine developed by Wankel operated as a four-stroke engine without valve control, with the rotating rotor increasing the size of the combustion chambers in eccentric motion or reducing them (while compressing the gas mixture).

By contrast, Wankel's original rotary piston engine was highly complicated inside: It was not just the trochoid that rotated, but also the surrounding casing.

It was the NSU engineer Dr. Walter Froede who came up with a crucial simplification of the engine. The rotating piston engine became the rotary piston engine: With this concept, the external rotor – essentially the housing – remains still, and only the piston rotates. The first car with this engine was the NSU/Wankel Spider, unveiled in September 1963.





90
years

Founding of Auto Union AG

The four Saxon motor vehicle manufacturers Audi, DKW, Horch and Wanderer ended up in financial difficulties due to the Great Depression of 1929. Impending bankruptcy was only averted by the four companies merging together with assistance from the Saxony State Bank.

Horch eight-cylinder Pullman saloon. In the 1930s, the company was the second-largest vehicle manufacturer in Germany.

Back in August 1928, Zschopauer Motorenwerke/DKW had acquired a majority shareholding in Audi Werke Zwickau. The merger to create Auto Union AG took place on **29 June 1932**. The absorbing company was Zschopauer Motorenwerke. The automotive department at the Wanderer plants in Chemnitz was acquired.



As a symbol of the merger and new company logo, the powers-that-be chose four interlocking rings. The four brand names Audi, DKW, Horch and Wanderer continued to exist. Each brand represented a specific segment of the market. This was intended to avoid any unnecessary competition within the new company.

Auto Union offered an extensive range of models, from the small DKW motorcycle through to the large



100
years

DKW motorcycle manufacturing

In 1919, DKW built auxiliary motors for bicycles in the small town of Zschopau, Saxony. In 1921, a scooter was then marketed under the name “Golem”. In 1922, Hermann Weber joined Zschopauer Motorenwerke as the new chief designer.

He was credited with designing the first DKW light-weight motorcycle with a fan-cooled, 148 cc two-stroke engine and belt drive which hit the market in 1922.

In June 1922, DKW entered this model in the race at the Avus track in Berlin and immediately secured the first four places.

The successes achieved in the ADAC Heidelberg-Berlin imperial rally this year gave the motorcycle the nickname “imperial rally model”. Between 1922 and 1925, 20,000 units of this first DKW motorcycle were manufactured.





100
years

Dr. Carl Hahn sen. joined DKW

Carl Hahn, who was born on 4 March 1894 in the Czech town of Nove Hradý, started his career at Zschopauer Motorenwerke/DKW in 1922 as the right-hand man to the company's owner J. S. Rasmussen. He quickly managed to establish a modern and highly efficient sales and marketing structure.

Following the founding of Auto Union AG, Chemnitz, Hahn was appointed to the company's board, where he was responsible for sales.

He played a crucial part in rebuilding Auto Union in Ingolstadt and Düsseldorf after the Second World War. He left the company on 30 June 1957 for health reasons.

Dr. Carl Hahn died on 5 June 1961 in the Belgian seaside resort of Le Zoute near Knokke.





105
years

DKW steam-powered cars

In 1916, at Zschopauer Maschinenfabrik, J. S. Rasmussen began developing a steam-powered motor car which was heavily based on the designs of the American steam-powered car manufacturer Rollin H. White from Cleveland/Ohio. The first test car drove under its own steam in 1917.

An oil-heated tubular steam boiler delivered steam pressure of up to 300 atm. The two-cylinder steam engine was flanged directly onto the rear axle without any gearbox.

All development work was stopped in 1921, with two vehicles continuing to operate at the plant until 1923. All that remained of the steam-powered car project was the registered word mark “DKW”, which was used in the following decades for all two-wheeled and four-wheeled DKW vehicles that had a two-stroke internal combustion engine.





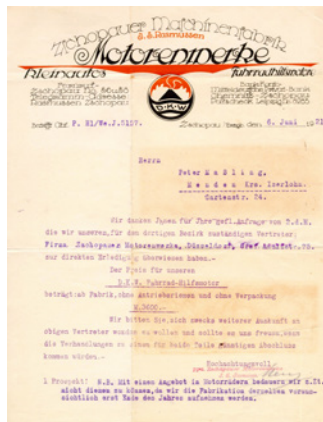
115
years

Founding of Zschopauer Motorenwerke

After his engineering degree, which he completed in Mittweida and Zwickau, Jörgen Skafto Rasmussen, who was born in Denmark, set up his own company manufacturing parts for steam units in Chemnitz in 1904.

On 14 October 1906 he acquired a cloth factory in Zschopau in the Ore Mountains which he initially had converted for the purpose of manufacturing the parts mentioned above. Production began on 18 January 1907; the company was registered in the commercial register of the town of Zschopau on **13 April 1907**.

During the First World War, Rasmussen worked to develop a steam-powered car (Dampfkraftwagen in German), from which the three letters DKW were derived and which went on to become famous around the world as the product name for Zschopauer Motorenwerke. After the First World War, the Zschopau-based company focused on developing the two-stroke engine which was initially used to assist bicycles, but from 1922 was then employed in the DKW motorcycles.





Motorsport



years

Audi S1 Pikes Peak record Röhrl

Pikes Peak – the 4,301 m high mountain in the US state of Colorado – has staged what is probably the most famous mountain race in America since 1916. Audi has made racing history here too. The spectators at Pikes Peak first saw an Audi in action in 1984 when Michèle Mouton secured victory in the rally car class driving the Audi Sport quattro. In the following years of 1985, 1986 and 1987, Audi managed to pick up the crown of overall winner three times in a row.

And that was not all – the mountain was actually conquered in a new record time three times running:

- 1985: Michèle Mouton, Audi Sport quattro, 11:25.39 min.
- 1986: Bobby Unser sr., Audi Sport quattro S1, 11:09.22 min.
- 1987: Walter Röhrl, Audi Sport quattro S1, 10:47.85 min.

The driver at the wheel on **11 July 1987** was Walter Röhrl, who was the first person to race up Pikes Peak in a record time of under 11 minutes driving this Sport quattro S1.





Motorsport

35

years

Audi 200 quattro rally car

“As a team, the Safari Rally in Kenya is one you need to have won once,” said Audi’s then Head of Motorsport Herwart Kreiner.

What had eluded the company in the previous years with the quattro rally car came to pass in 1987 when Audi was already in the process of withdrawing from the international rally scene: the first and second place finish by Mikkola/Hertz and Röhrhl/Geistdörfer in the Safari Rally 1987. In that year, in response to the fatal accidents in the 1986 season, the Rally World Championship was only staged within Group A. Audi had two types of car

that qualified under Group A rules: the Coupé quattro and the 200 quattro.

The 200 model proved to be the more robust vehicle during test runs. So two executive saloon cars with a rally trim started the race – with outstanding success.

At the end of the gruelling rally, co-driver Geistdörfer said quite tersely: “All you need to do with ours is wash it, change the dampers, and you can send it on to the next rally training session.”





Motorsport

40

years

Audi's first Rally Manufacturers' World Championship

Audi was the first manufacturer to send a racing car with four-wheel drive out racing. With the Audi quattro, which was unveiled in 1980, the team from Ingolstadt really shook up the rally scene the very first time they participated. "quattro" heralded a new era. Motorsport was the inspiration for series production – "quattro" became a milestone in Audi history.



Its first deployment as a course car at the Algarve Rally in autumn 1980 clearly demonstrated what the new technology was capable of.

The Audi quattro celebrated its first victory at the Jänner Rally in Austria in 1981. It made its international debut shortly after at the Monte Carlo Rally. By the end of the first season, Audi had recorded three victories in eight selected rallies.

In the world championship season of 1982, Audi won seven of the eleven races. Michèle Mouton only just missed winning the Drivers' World Championship. However, Audi did pick up the Manufacturers' World Championship.





Motorsport



years

Demuth/Fischer German Rally Champions

Harald Demuth drove a test year for the newly founded Audi team back in 1979. In 1980, he competed in the German Rally Championship driving an Audi 80 GTE.

From 1981, he also drove an Audi coupé on the rally courses for the Cadolzheimer SMS Team.

When SMS was able to deploy an Audi quattro in 1982, Harald Demuth switched to the four-wheel-drive Group 4-A1. With Arwed Fischer as his co-driver in the Audi, he won seven out of ten rounds of the German Rally Championship, came second one time and finished seventh on another occasion.

At the end of the season on 10 October, following the end of the International 3 Cities Rally, the Demuth/Fischer team celebrated the title of “German Rally Champions”.





Motorsport



years

DKW victories

In addition to the successful 250 cc two-cylinder racing motorcycle, DKW engineer Görg had also developed a sensational three-cylinder bike for the 350 cc class.

Despite a few teething problems, the potential of the 350 cc bike was reflected in eight victories and four

second-place finishes. In 1952, DKW also uniquely competed in the 125 and 175 cc classes.

By the end of the 1952 season, the Ingolstadt team had secured 15 first places, 8 second places and 3 third places.





Motorsport



years

NSU motorcycling successes

Back in the 1951 racing season, the 125 cc NSU Rennfox with its DOHC engine with an upright shaft and 12 horsepower at 10,500 rpm had shown that it was an opponent to be reckoned with in this class of established two-stroke engines.

The top rider on the Rennfox was Otto Daiker, but he had to make do with second place in the German Championship in 1951.

In 1952, the 41-year-old “senior” Daiker claimed the title of German Champion in the 125 cc class despite an accident-enforced break. NSU also secured third place in the championship, with Wilhelm Hofmann on the podium. Fourth place was claimed by Herbert Luttenberger, and Werner Haas finished fifth. The little NSU was simply unrivalled.





Motorsport

85

years



Rosemeyer speed record

In the period from 25 – 29 **October 1937**, the international record week was held on a section of the new motorway between Frankfurt and Darmstadt. Both motorcycles and cars, private drivers and factory teams competed.

Auto Union entered a streamlined 16-cylinder racing car with a 6.33-litre engine that produced 545 horsepower. It was driven by the legendary Bernd Rosemeyer.

For the first time in automotive history, he managed to break through the “magical threshold” of 400 km/h on a normal road. The average of both measurements produced a top speed of 409 km/h.

The physical and psychological strain during these drives was huge.

When Rosemeyer finished, it was several minutes before he could summon the strength to get out of the racing car on his own.

By the end of the record week, Rosemeyer had racked up two world records and 13 international class records.





Motorsport

85

years

DKW motorcycling successes

By the end of the 1937 racing season, the DKW factory team had secured three German Championships, two European Championships and a third-place finish in the 250 cc World Championship.

Ewald Kluge

German motorcycle champion in 250 cc class

Third in world championship in 250 cc class

Karl Braun/Erwin Badschig

German motorcycle champions in 600 cc sidecar class

European champions in 600 cc sidecar class

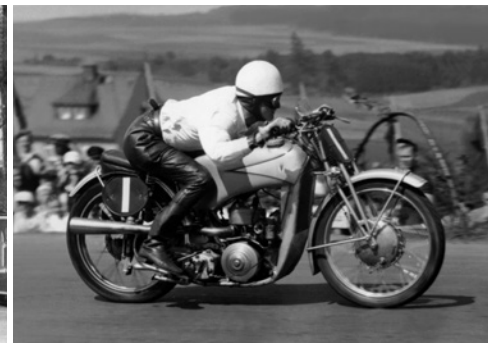
Hans Kahrmann/Heinrich Eder

German motorcycle champions in 1000 cc sidecar class

Hans Schumann/Julius Beer

European champions in 1000 cc sidecar class

On the race circuit, the quick two-stroke models in the 175 cc solo to 1000 cc sidecar classes secured 44 first places, 23 second places and 25 third places.





Motorsport

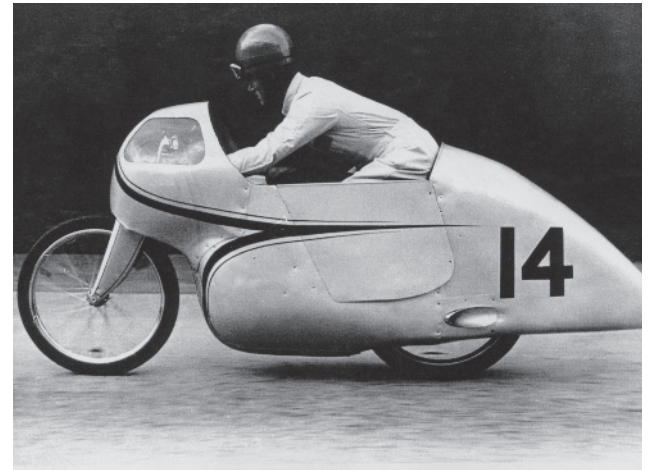
85

years

DKW world records

During the ONS record week in **October 1937**, Walfried Winkler and Ewald Kluge brought 14 motorcycle world records over the distances from 1 km to 10 miles in the 175 cc and 250 cc classes back to Zschopau.

The picture shows Walfried Winkler, who is “bending down low” on the partially encased DKW motorcycle with charge pump. It is also worth noting his aerodynamic crash helmet in the picture on the left. The photo on the right shows Ewald Kluge on his 250 cc record-breaking bike.





Motorsport

85

years

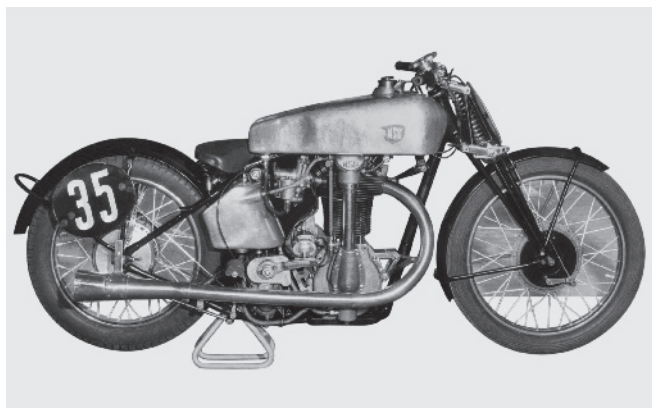
NSU motorcycling successes

The single-cylinder machines from Neckarsulm that were designed by Walter William Moore had exhausted their potential for development by 1937.

In addition to the 350 cc and 500 cc solo class, engines with an upright shaft, single and twin camshaft control and up to 700 cc of capacity were used in sidecar races.

By the end of the racing season, NSU had amassed nine world records and 90 victories in road and off-road races.

Heiner Fleischmann won the German Championship in the 350 cc class, and the Swiss sidecar rider Senn became Swiss Sidecar Champion in the 1000 cc class.





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