



A U T O U N I O N

and its development

The AUTO UNION was founded in 1932 with its headquarters in Chemnitz, following the decision of three leading motor concerns — Audi, Horch and Zschopauer Motorenwerke J. S. Rasmussen A. G. (DKW-Werke) — to amalgamate and form a joint company under the name of AUTO UNION A. G. Shortly after the amalgamation, the motor car department of Wanderer-Werke A. G. was affiliated to the new organisation under a purchase contract.

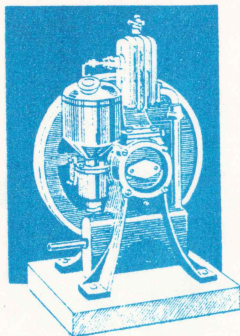
The AUTO UNION was thus in a position to offer a production programme which — backed by a wealth of specialized experience and a proud record of many years standing — covered a complete range from the normal motor-cycle to the large model de luxe car of internationally recognized performance representing the best value in its class.

Whilst August Horch started manufacturing his

Horch cars as far back as 1899 and set up a second automobile plant known as Audi-Werke, in 1909, the Wanderer-Werke commenced the production of automobiles in 1905. Since the time of their inception, the automotive designs associated with the names of Audi, Horch and Wanderer have occupied a prominent place in the world of automobile engineering as examples of the expert workmanship for which Germany is famous. The DKW-Werke came into being in the year 1916, when J. S. Rasmussen conceived the idea of constructing his "Dampfkraftwagen" (Steam power cars) which he intended to name by the abbreviated designation DKW. However, the adverse conditions then prevailing in Germany as a direct outcome of World War I, prevented him from realizing his ambitions. Instead, he devoted his attention to designing a small toy motor which he named "Des Knaben Wunsch" (The boy's dream). It was while he was engaged on this work that he first came to realize the simple principle

of construction that characterized the two-stroke engine, and he instantly resolved to make use of its many advantages by including it in the mechanical design on which he was then working.

and ingenuity to the further advancement of the two-stroke principle, in whose superiority they firmly believed, but which they had to defend against a world filled with prejudice and bias.



THE FIRST DKW TWO STROKE MOTOR

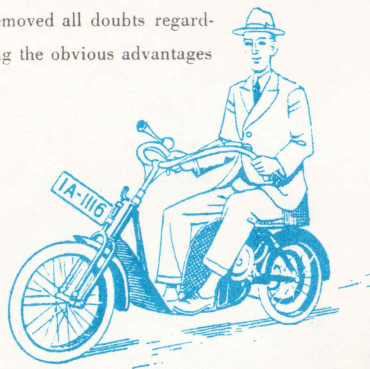
In 1919 the Zschopauer Motorenwerke developed the first DKW two-stroke engine, which had a capacity of 40 c.c. and which was provided with a flywheel magneto. This engine, tiny as it was, developed $1\frac{1}{4}$ BHP

By 1921 the DKW Works had developed the prototype of the motor-scooter. Its improved design was then produced in a series of 2000 units under the designation "Lomos-Sesselrad." From the "Sesselrad" the way led in the same year to the DKW motor-cycle whose triumphant tour started with the type "DKW-Reichsfahrt-Modell." This design, which had a power output of $1\frac{1}{2}$ BHP, won world-wide reputation by the spectacular successes it scored on the racing tracks.

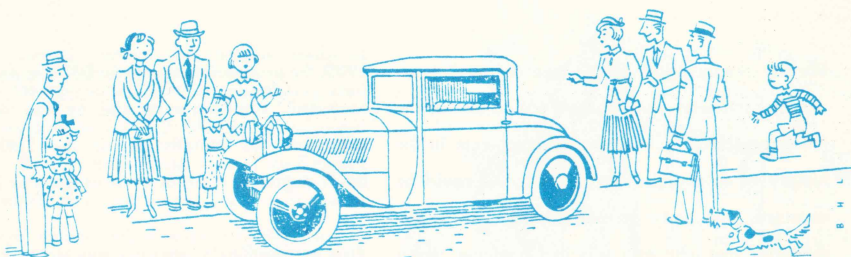
— certainly a most amazing technical achievement.

But progress seldom pauses for long. By way of the type E 200 — a 200 c.c. engine with turbofan cooling, two-speed block gearbox and kick-starter, which, due to its outstanding reliability and performance, definitely removed all doubts regarding the obvious advantages

This unique performance of the first two-stroke engine encouraged the DKW Works, in 1920, to design a bicycle motor capable of developing 1 BHP, which was given the name DKW — Das kleine Wunder (DKW — the little marvel). This valveless two-stroke engine excited the unanimous interest of the contemporary engineering world because of the surprising simplicity of its design features. It was not only the first of its kind to be put into mass production in the service of motorization, but, what was even more important from the standpoint of the future expansion of the DKW Works, its development became the life-task of those directing the destinies of the firm. These men, by their tenacious energy and their determination to see a thing through once the plans were made, devoted all their resources



1921 THE » LOMOS-SESSELRAD « SCOOTER
inherent in the design features of the DKW two-stroke engine — continuous development and constant research pursued their course. These cease-



1932 THE FIRST DKW - CAR WITH FRONTWHEEL DRIVE

less efforts culminated in the "DKW Luxus 200," a motor-cycle that proved not only to be one of the greatest successes as expressed in sales figures, but represented a unique constructive pioneering achievement due to the profusion of novel structural elements incorporated in its design. Here for the first time a frame of sectional, welded and screwed steel sheets and a fuel tank designed as a saddle tank were employed in large-scale mass production.

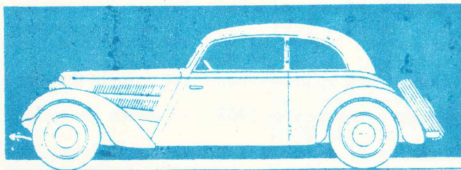
In 1924 the DKW Works were the first firm in the motor-cycle industry to introduce the system of payment by instalments. In the same year they opened the first works-owned training school of the German motor vehicle industry to help ambitious people towards success by providing specialized training for commercial and technical advancement. In doing so, they also pioneered an exemplary system for the provision of advice and useful information to their customers from which evolved an after-sales service organisation built on a generous scale.

The year 1926 witnessed the production of no less than four types of DKW motor-cycles: a 200 c. c.,

250 c. c., 300 c. c. and, finally, a 500 c. c. air-cooled two-cylinder machine. In 1927 the annual production figure rose to more than 27 000 machines; a year later, the annual production soared above 43 000!

In 1928 the DKW Works took up the manufacture of a DKW car equipped with a 500 c. c. two-stroke two-cylinder engine. In addition to the DKW motor-cycles, which by this time had gained world-wide fame, it was now the turn of the DKW cars to start on their unparalleled triumphant tour. This outstanding success was due entirely to those unique design features whose value had been recognized by the progressive men of the DKW Works more than two decades before — men who had stuck tenaciously to their ideas because they definitely felt them to be right. Today, the DKW design is being increasingly adopted everywhere.

In 1932 the first DKW car with front-wheel drive made its popular appearance — the first



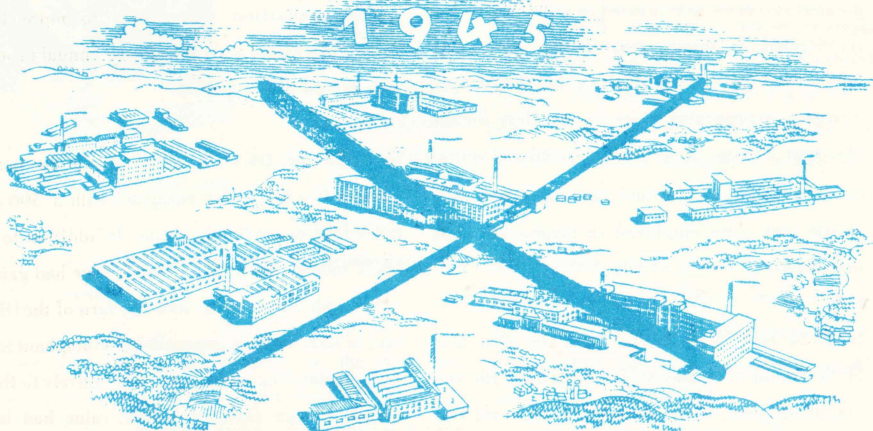
1938 DKW - MEISTERKLASSE

front-wheel drive car to be manufactured in large-scale mass production. Invading an hitherto unexplored technical field, this car not only marked a de-

liberate renunciation of the conventional practice in car design, but it stood out as one of the most remarkable pioneering achievements in the history of automobile construction. As could be expected, this truly revolutionizing feat of engineering met with an undivided response which is reflected in the following pattern of production: In 1935, 50000 cars left the works; 9 months later the figure had risen to 100000. By 1940, more than 255000 had been supplied, tens of

1939, the production figures for DKW motor-cycles exceeded 1½ million units, and the year following witnessed the installation of the 1000000th DKW engine in a motor-cycle of the type RT 125.

This extraordinary upswing was stopped abruptly in 1945. The AUTO UNION was particularly hard hit by the disastrous events which followed in the wake of World War II. All the plants of that enormous enterprise located in Saxony —



thousands of which were exported to practically every part of the world.

which employed a labour force of more than 36000 — were dismantled and expropriated.

Meanwhile, the demand for DKW motor-cycles was increasing at a tremendous rate. To cope with this situation, the DKW Works — which had by this time become the world's largest motor-cycle manufacturers — had to step up production from year to year, a highlight being the year 1935 which marked the completion of the 300000th motor-cycle — an unprecedented record in the motor-cycle producing industry of the period. By

Those were the dark, bitter days when it seemed that the fate of the AUTO UNION was sealed forever. And yet; the responsible men of that proud concern were not prepared to resign themselves to the thought that the great name of AUTO UNION — which for so long had been indicative of consistent high quality — should become a thing of the past. Therefore, in 1948, some of the old crew rallied round the symbol of the four rings and

decided to revive the glorious tradition behind the name DKW and to lay the foundations of a new AUTO UNION. Encouraged by the fact that, in the area of the German Federal Republic alone, DKW at that time held second place with 150000 cars in circulation — and this despite a ten year break in production — these men put their shoulders to the wheel, with the result that the seemingly impossible was achieved in defiance of a vast array of unimaginable difficulties.



THE NEW PLANT IN INGOLSTADT



THE 1000 TH DKW - COMMERCIAL

Early in 1949 a new manufacturing plant for DKW vehicles was established in Ingelstadt. Under the leadership of executives who had long proved their worth, engineers and workpeople joined hands in that town to produce a new DKW Commercial Vehicle and the DKW motor-cycle RT 125 of improved design. The pace of the growing demand for the new DKW vehicles surpassed all expectations. Three months after commencing production, the 1000th motor-cycle left the newly built plant: a month later, the 1000th DKW Commercial followed suit.

2½ years after production started, the Ingelstadt Plant — which in the meantime had been

expanded — could look back with pride upon a production of more than 18000 Commercial Vehicles.

Up to the beginning of 1953 more than 100000 DKW motor-cycles of the new production were on the roads in all parts of the world: by the end of 1950 their numbers had outflanked those of all other competitors. The DKW RT 125 had again become the most sought-after motor-cycle of its class. Since DKW had pioneered the motor-cycles of the 200 c.c. class, it was only natural that the DKW company — in response to an ever increasing demand on the part of the many friends of the DKW products — should turn their attention also to the production of more powerful DKW machines. The efforts made in this direction resulted in the DKW RT 200, which was produced early in 1951, to be followed in 1952, by the new DKW RT 250.

Of these two types more than



DKW RT 125

25000 units had been produced by the middle of 1952.

With a labour strength of more than 4500, the Ingolstadt plant again ranks among the most important production centres of the motor vehicle industry.

When in 1949, the new AUTO UNION G.m.b.H. had become firmly established in Ingolstadt, and, despite difficulties that initially seemed unsurmountable, DKW motor-cycles and DKW commercials were rolling off the assembly lines, the next problem to be considered was the construction of a new plant for the manufacture of DKW passenger cars.

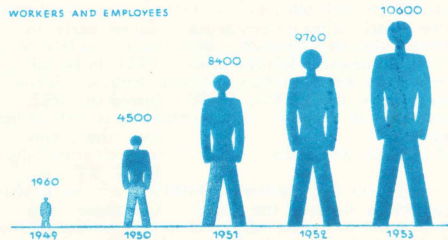
With this end in view the AUTO UNION executives went in quest of a suitable site for the factory buildings, and a location was eventually found on the outskirts of Düsseldorf. On the 13th March, 1950, after signing an impressive number of contractual documents, the way was at last open to start with the debris clearance and reconstruction work in the grounds formerly occupied by the Works II of Rheinmetall-Borsig A.G. Again the new AUTO UNION found themselves confronted with an apparently hopeless task. A debris area comprising almost 250000 sq. yds. filled with a chaos of concrete and steel structures destroyed by bombing, had to be cleared before there could be any thought of erecting new buildings and engaging in mass production of DKW motorcars.

Here again, however, indefatigable endeavour succeeded in achieving the seemingly impossible. By August 1950, that is to say, in little less than 6 months after the implementation of the great scheme, the new DKW Meisterklasse cars were coming off the assembly lines in ever increasing numbers. Beginning with one manufacturing hall, the plant was gradually expanded with a resultant steady increase in productive capacity.

From August 1950 to April 1951, that is to say, during the first nine months of activity — in a manufacturing hall occupying a floor space of 12000 sq. yds. and with a labour strength whose number increased from 300 to nearly 2000 — the monthly production rose from 25 cars in the initial period to 1000 DKW cars. In the aggregate, 5000 cars were produced in the first phase of the operation of the new plant.

The month of May 1951 marked the commencement of the second phase of the building and manufacturing programme. At that stage the producing unit of the plant was transferred to a newly built hall which, occupying a floor space of some 32000 sq. yds. has been dignified by the name of "Dr. Richard Bruhn-Halle." Today, this hall forms the core of the whole plant.

Simultaneously, more large halls for housing the departments responsible for control, finishing, issues, shop repairs, customer service, incoming goods, despatch, etc., occupying an area of some



25000 sq. yds., came into operation or were nearing completion, such as the hall for the mechanical department, the area of which covers some 22000 sq. yds. Thus, an area of more than 90000 sq. yds. has already been reclaimed to date for the purposes of manufacturing activities.

Meanwhile, the number of employed people rose to more than 3000, paralleled by a monthly rise in production to more than 2000 units, which means that nearly 30000 DKW passenger cars of the following designs had been produced by the middle of 1952:

DKW Meisterklasse Saloon

DKW Meisterklasse Saloon
with sunshine roof

DKW Meisterklasse Convertible
(4-5 Seater)

DKW Meisterklasse Drophead Coupé
(2 Seater)

DKW Meisterklasse Two-Seater Coupé

DKW Universal (Station Wagon)

The unbroken flow of production — which today is capable of producing a finished DKW car every 4 minutes — requires a vast supply of materials. In fact, no less than 100 tons per day are being brought to the plant by road and rail transport.

Difficult as it was to make a new start from scratch, in the end it proved an advantage, as, without having to make allowances for existing facilities, the new operating units could be planned

from the outset on lines of the most modern shop practice, and in a manner that will keep them abreast of the exacting demands a modern plant is expected to satisfy, with an eye to to-morrow's needs.

In the meantime nearly 30000 passenger cars have left the assembly line at Düsseldorf and more than 150000 DKW motor-cycles are on the road to the satisfaction of their owners.

AUTO UNION at present employs more than 10000 people. Impressed by the pioneering spirit of the "old DKW crew" and under the spell of a tradition closely linked with the development of the two-stroke engine, the workers and employees are inspired with one great ideal: not only to help keep up the lead of the renowned DKW products

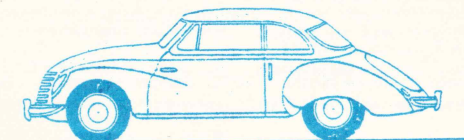


AT THE END OF THE ASSEMBLY LINE

in point of good workmanship and excellent design, but to enhance their already remarkable high performance — in accordance with a policy of continuous engineering ingenuity and resourcefulness which keeps the name DKW in the forefront of motor developments.

The production of the new DKW passenger car

model "Sonderklasse" commenced in July 1953, a model that will further enhance the popularity of the AUTO UNION and its products. The DKW THREE-SIX is equipped with the newly designed 3-cylinder engine which develops 34 BHP from 900 c.c. Demands for this car — which is now leaving the assembly line in ever increasing numbers — are growing from week to week.



1953 THE NEW DKW - SONDERKLASSE



AUTO UNION G.M.B.H. • INGOLSTADT • DUSSELDORF (WESTERN GERMANY)

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