

BMW

A HALF-CENTURY OF IMPRESSIVE HISTORY

THE RECENT APPEARANCE in this country of Max Klankermeier, former sidecar champion of Germany, and a team of BMW factory service experts stirred the interest of many American riders in the historical background of the sleek Munich twins. Klankermeier joined BMW as an apprentice mechanic in 1923, the same year in which the firm offered its first production-line motorcycle, the model R32 500cc twin. His supervisor was Max Friz, the man who created a motorcycle design so original that it paced the industry for decades and that remains to this time essentially the same: a horizontally-opposed, two-cylinder engine in-unit with the gearbox, shaft drive to the rear wheel and a double-loop frame. In the following pages, we present a photographic history of BMW motorcycles, showing how this basic concept evolved into the models of today.

Max Friz was an extraordinary designer who by 1923 had already gained considerable distinction and who was to gain even more of a reputation in the years to follow. For BMW he had designed a revolutionary aircraft engine which was instrumental in establishing a world altitude record. He had also designed a number of highly-reliable four-cylinder engines for land vehicle and marine use. Later he was to take part in the creation of many successful competition motorcycles and automobiles. His young apprentice, Klankermeier, was also to become an ace tuner-designer in his own right, and one of many BMW competition riders.

Friz' original design was intended primarily for motorcyclists who sought speed, reliability and ease of maintenance for everyday riding. But BMW machines quickly appeared on the race courses of Europe. One year after their introduction, they had won 13 first places, 5 second places and the German road-racing champion-

ship. In 1925, BMW riders captured 91 first places in European competition and both a gold and silver medal in the International Six Days Trial. As their fame rose, so did BMW sales, and the factory itself began limited competition sponsorship by the late twenties. In 1929, Ernst Henne established a motorcycle world speed record on a BMW at 134.6 mph. In 1937, he raised this figure to 173.57 mph, a record that stood for 14 years. Over the years, BMW machines have set 195 world



speed records and today still hold 27. On the current list are the official world sidecar record of 174.0 mph and the sidecar standing-start kilometer of 88.38 mph.

European road racing successes continued to follow the pattern of the speed attempts. A high point was reached in 1938 when Georg Meier won the 500cc solo world championship on a supercharged BMW twin. A year later he won the Isle of Man Senior TT. Postwar victories have been primarily in the sidecar class, but in a

manner utterly without precedent in international competition. A BMW twin captured the sidecar world championship in 1954, the first of 12 successive claims to that title which continue to the present.

In America, where BMW machines did not appear in quantity until the early fifties, BMW riders have produced records of quite a different kind. Take John Penton, for example, an Amherst, Ohio BMW dealer. Penton has ridden and won enduros all over the country on a BMW R27, including the famous 500-mile Jack Pine Enduro. In the summer of 1959, he decided to tackle another challenge by attempting the U.S. coast-to-coast record. Penton covered the 3,051-mile distance in a little over 52 hours on an R69, setting a record that still stands. In recent years, Penton has been participating in the ISDT in Europe.

Another BMW dealer, Ed LaBelle of Philadelphia, traveled north to win the Canadian National Championship in 1958 and 1960 on a BMW Rennsport production racer. Earlier in the 1950's, Stan Myers of Doylestown, Pennsylvania, established several U.S. dirt-track records on a BMW. Finally, there is the inimitable Danny Liska of Niobrara, Nebraska, who has accomplished two of the most difficult and unusual feats in the history of motorcycling. Riding a model R60, Danny set out from northern Alaska and rode to the tip of South America, some six months and 95,000 miles later. As a sequel to this journey, he ventured forth from the northernmost point in Europe and rode to the southernmost point of Africa, a distance of some 40,000 miles.

ENGINES SIMILAR TO ORIGINAL

The engines that powered BMW machines through this competition and endurance history all shared a similarity to the horizontally-opposed twin designed by Friz in 1921. That first engine produced

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6.3 hp at 3,000 rpm. Conceived as a general-purpose unit, it was offered for use in both stationary and vehicular applications. Thus it was fitted to a number of early motorcycles, such as the Victoria and the Helios, who used the engines in a fore-and-aft position. By 1923, when the BMW production lines began to roll, the engine was mounted in a transverse position for better exposure to the airstream. Its horsepower, quite good for 500cc with sidevalves, had risen to 8.5 at 3,300 rpm. That was the first in a series of improvements in the performance and reliability of this basic twin power unit.

Over the years, the "boxer" twin came out in 500, 600 and 750cc displacements with both side- and overhead-valve layouts. Power rose from 6.3 bhp to an extraordinary maximum of 105 bhp for the 500cc supercharged competition twin of the late 30's. The supercharged engine was so robust that it could take the punishment of cross-country competition without complaint, but it was strictly a factory special and never appeared on production machines.

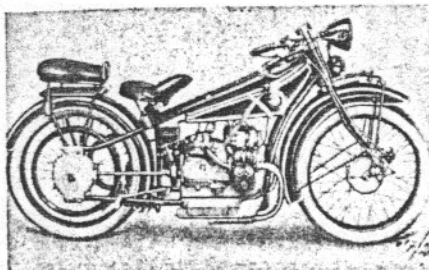
With blowers outlawed for international competition after World War II, both factory and private tuners have been experimenting with fuel-injection with increasing success. In the mid 50's, the factory produced some 32 overhead-cam Rennsport engines for production racers, but since then has concentrated on the support of individual sidcar rigs. The current line of 500 and 600cc production twins has overhead valves, and produce a maximum of 42 hp in the R69S model.

Besides the horizontally-opposed twins, BMW has also produced vertical single-cylinder engines in most years since 1925. These were placed in machines with the classic BMW features: in-unit gearbox, shaft drive and double-loop frame. A factory policy has been to use the single-cylinder configuration for any displacement under 500cc. The first single, fitted to the model R39, had overhead valves and produced 6.5 hp at 4,000 rpm from 250cc. Over the years, other models have appeared with capacities of 200, 250, 300, 350 and 400cc. All postwar singles have had 250cc ohv engines, their output gradually increasing to the 18 hp of today's model R27.

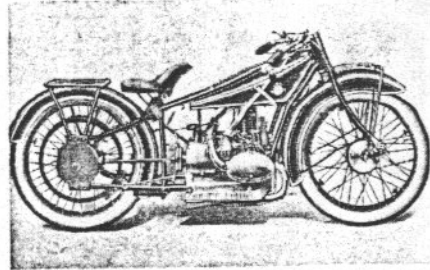
FRAME, DRIVE, SUSPENSION

Paralleling engine development, BMW designers have also improved the frame, drive and suspension of the production machines. The early models appeared with cast-iron-pipe frames; three-speed, hand-shift transmissions; internal expanding front brakes; and dummy-rim rear brakes. The dummy rim was soon abandoned, a driveshaft brake tried, and then conven-

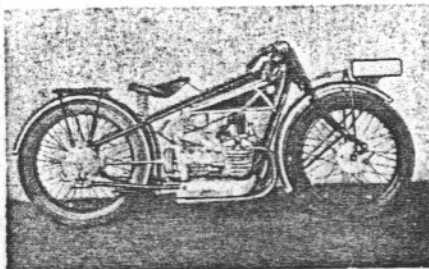
R 32, 1923-26, 500cc SV, 8.5 hp at 3300 rpm. BMW's first production-line motorcycle.



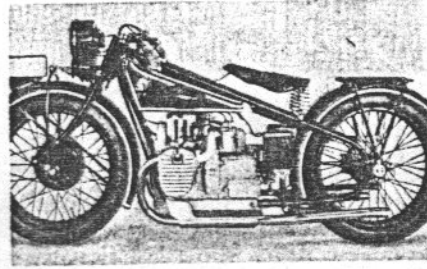
R 37, 1925-26, 500cc OHV, 16 hp at 4000 rpm. Early shaft drive.



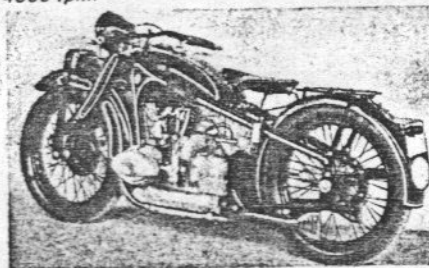
R 52, 1928-29, 500cc SV, 12 hp at 3400 rpm.



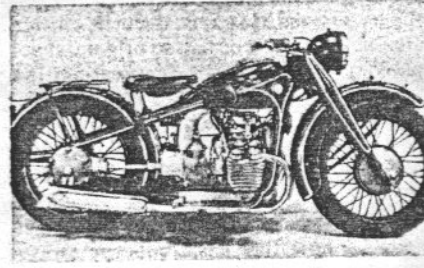
R 62, 1928-29, 750cc SV, 18hp at 3400 rpm.



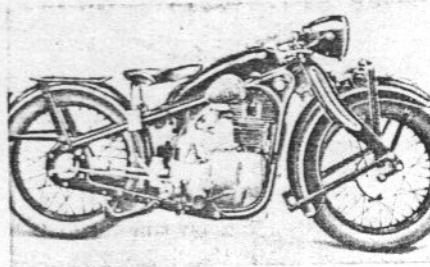
R 16, 1929-30 & 33-34, 750cc OHV, 26 hp at 4000 rpm.



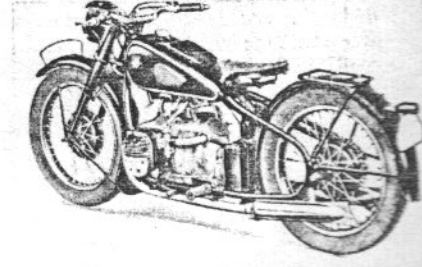
R 12, 1935-41, 750cc SV, 20 hp at 4000 rpm. In 1935, the marque produced the industry's first telescopic fork.



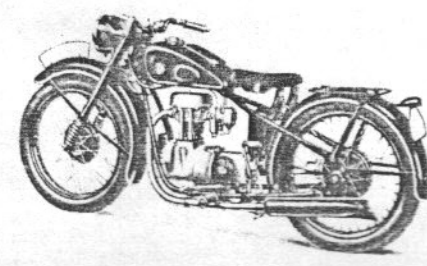
R4, 1936-37, 400cc OHV, 14 hp at 3500 rpm. Company policy has called for single cylinders on all bikes under 500cc.



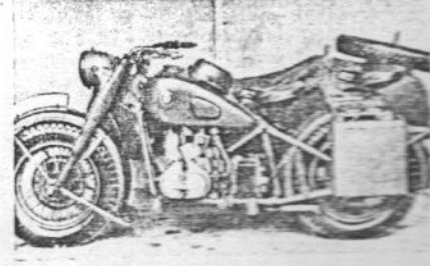
R6, 1937, 600cc SV, 18 hp at 4800 rpm. Double-loop, tubular-steel frame was introduced this year.



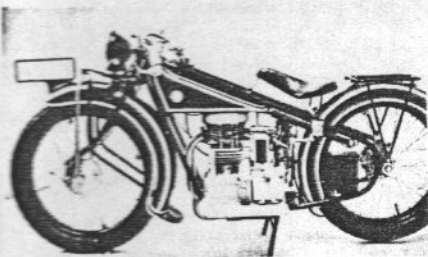
R20, 1938-40, 200cc OHV, 8 hp at 4500 rpm.



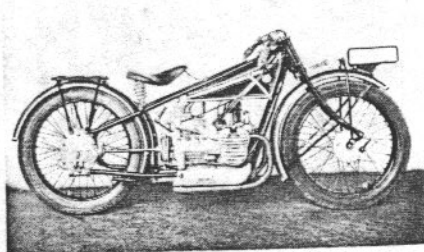
R75, 1941-45, 750cc OHV, 26 hp at 4400 rpm. This World War II machine had power drive to the sidcar wheel.



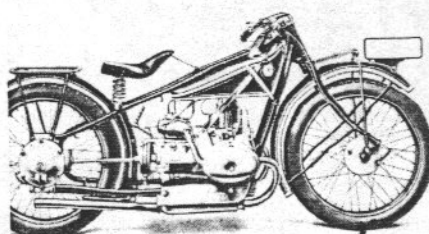
R39, 1925-26, 250cc OHV, 6.5 hp at 4000 rpm.
First BMW single.



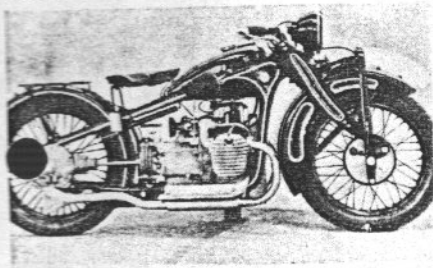
R 42, 1926-28, 500cc SV, 12 hp at 3400 rpm.
Footboards, leaf-spring front fork, solid rear suspension, bicycle-type seat



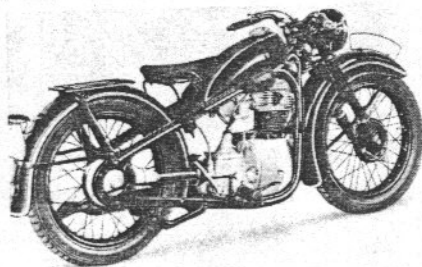
R 47, 1927-28, 500cc OHV, 18 hp at 4000 rpm.
This had the horsepower of today's R 27—a 250cc single.



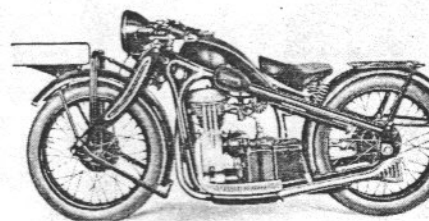
R 11, 1929-33, 750cc SV, 20 hp at 4000 rpm.
The "star" frame, adopted in late 1929, was of pressed steel



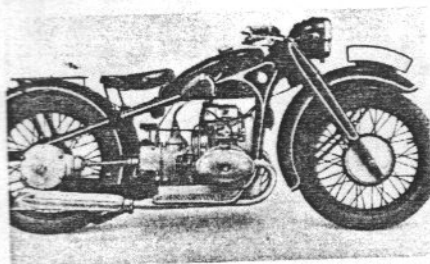
R 35, 1932-37, 350cc OHV, 14 hp at 5200 rpm.



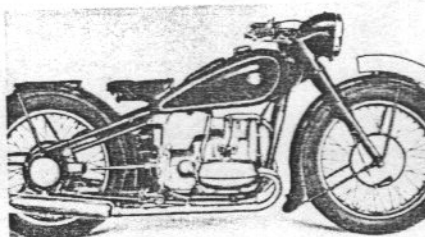
R 2, 1933-38, 200cc OHV, 6 hp at 3500 rpm.



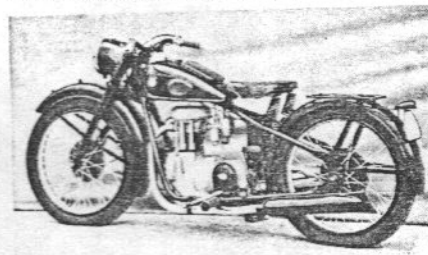
R 17, 1935-37, 750cc OHV, 33 hp at 4500 rpm.



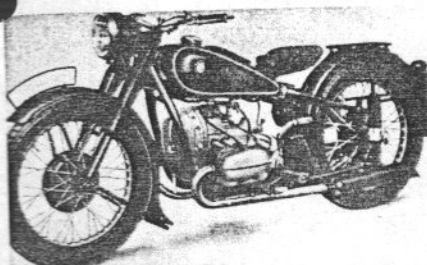
R5, 1936-37, 500cc OHV, 24 hp at 5400 rpm.



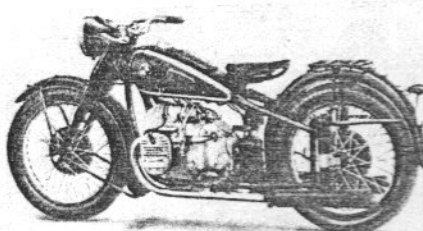
R23, 1936-37, 250cc OHV, 10 hp at 5400 rpm.



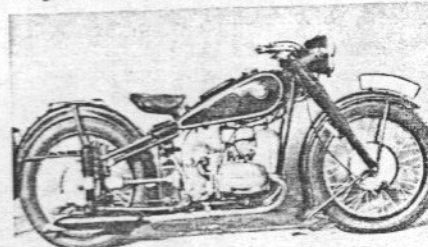
R61, 1938-39, 500cc OHV, 24 hp at 5400 rpm.



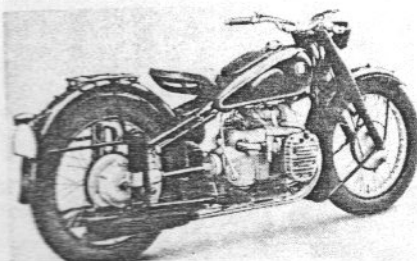
R61, 1938-39, 600cc SV, 18 hp at 4600 rpm.



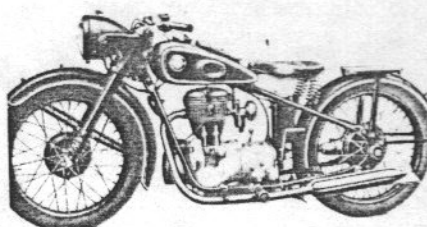
R66, 1938-40, 600cc OHV, 30 hp at 5400 rpm.
Plunger rear suspension appeared in 1938.



R71, 1941-44, 750cc SV, 22 hp at 4600 rpm.



R24, 1949, 250cc OHV, 12 hp at 5600 rpm. All postwar singles have been of this displacement.



R51/2, 1950-53, 500cc OHV, 24 hp at 5800 rpm.

