

# History Of Zundapp

Success Is Accumulating 9923 Gold Medals In 51 Years  
Without Ever Building An Exotic  
"Works" Machine / By Geoffrey Wood



**G**ERMANY HOLDS a unique position in the history of the motorcycle. The world's first motorcycle was assembled there by Gottlieb Daimler in 1885, and a few years later the Hildebrand and Wolfmüller became the world's first "production" machine. Despite this early interest in motorized transportation, the Germans were rather tardy where mass production is involved, and foreign machines were imported in great numbers during the early days.

All this changed in the early 1920s when BMW, NSU and Zundapp got into gear, and for the next 20 years Germany played an effective game of catch-up with the leaders. Today, Zundapp is the largest producer of motor bikes in Germany, but let's not get ahead of ourselves. Zundapp got its start in 1917 by producing armament parts for the war, but this came to a quick halt when the First World War ended. Fritz Neumeyer, who assumed sole ownership of the company, decided that the time was ripe for a "people's" motorcycle—an inexpensive and reliable mode of transport that would take the play aspect away from British bikes.

The result was something in between the flimsy motorized bicycles and the larger 300 to 1000cc foreign machines. It wasn't very exciting, but it was reliable and sold at a price the common man could afford. The first five were produced in the fall of 1921. In 1922 the new Z22 model went into serious production.

The new Zundapp was a 211cc two-stroke Single with 62mm bore and 70mm stroke, and it churned out a reliable  $2\frac{1}{4}$  bhp. A Bosch magneto was used for ignition, and a small, hand operated oil pump helped lubricate the engine. The method of transmitting the power was rather primitive compared to foreign bikes, since a belt was used directly from the engine to the rear wheel. There was no clutch. Riders just pushed it off to start. Weight was quite light at 132 lb.

The Z22 proved to be a reliable model which was easy to control, and it became an instant success on the sales floor. Performance was nothing to get excited about, but good handling did enable Hans Metsch and Rider Wolf to score wins in the North Bavarian Trials and the Wurgau Hill Trials. At the Reichelsdorf Track, the Z22 ran for 133.514 kilometers on only one litre of fuel. That works out to 268 miles per gallon—an impossible feat today!

The Z22 was soon followed by the G-22—a Z22 with a three-speed hand-shifted gearbox and clutch. Belt drive was retained, but the added gears and a clutch made this Single more modern compared to the foreign bikes.

In 1924 a new Zundapp appeared, called the K249, and at last it looked as

though the company had a "modern" motorcycle. The K249 had a larger, 249cc engine with measurements of 62 by 82.5mm, and a roller chain drive finally replaced the primitive belt drive. Weight jumped to 167 lb., and the 3.5 bhp engine provided a respectable speed of 44 mph.

These early Zundapps performed well in the longer races held then, with a 1-2-3 in the 1922 Reichsfahrt Race plus a win in the 1924 Katalonia 517 mile event. In 1925, a K249 won the Austrian Alpine Rally, which was an 1116 mile run to Milan and Naples, Italy.

In 1925, a vastly improved model was introduced, called the "Standard," which was a 250 two-stroke Single with an oil pump to deliver oil from a 1.5-quart tank to the engine. This use of positive oiling to the cylinder walls helped prevent piston seizure (which plagued early two-strokes), and gave Zundapp an edge on the competition.

Power output was up to 4.5 bhp then, and the 185-lb. Single used a quart of oil every 496 miles. The frame was still rigid and the front fork was nearly rigid, so the 2.25-24-in. tires were left to handle all the bumps in the road. The ride was, naturally, a bone jarring experience. Over the following three years, 26,000 of these Singles were produced.

Zundapps continued to do well in reliability runs, with wins in the 1927 German Six Day Race plus the Cross Country d'Como. A win was also achieved in the 1928 German Six Day event, plus many trials. By then the company had established a policy of competing on its standard machines in reliability and endurance events, but shunning the more exotic grand prix races which required special works racers quite different from what they sold. To this day, that policy has never been violated.

In 1928 the Z300 model was introduced, which pumped out 8 bhp and ran a respectable 62 mph. The bore and stroke was 68 by 82.5mm for 298cc, and weight jumped to 231 lb. For the first time an alloy piston was used, as was a good girder front fork with a large coil spring. The heavier weight required larger 2.85-26-in. tires, and the engine was canted forward in the frame.

To prove the reliability of the latest Zundapps, Julius von Krohn made a trip to Africa and back in 1928. Two students then rode from Berlin to the Black Sea and back without a single breakdown. These feats helped to establish the name even more, and production continued to expand. In 1930 Von Krohn broke a record for both cars and bikes for the run from Berlin to Paris on his Z300. The rough roads and rough ride of these early bikes was attested to by Julius, whose forearms were pounded so fiercely that they were swollen to the size of his biceps!

In 1929 a new factory was built at Nuremburg to handle the increased demand, and production climbed to 4200 machines in April. By December the output was down to only 300, though, as the effect of the worldwide depression was felt more severely in Germany than elsewhere. Many companies "went to the wall," but Zundapp pulled through with the help of young Hans Neumeyer, who had studied finance and production economics in both Germany and England.

By 1930 Zundapp realized it needed to add a four-stroke model to its line. In an effort to do this quickly and with little tooling-up expense, they decided to obtain Python engines from the British Rudge factory. The new model was a 500cc Single in stock and super sports trim. The stock model developed 18 bhp, while the SS version churned out several more horses for an 80 mph speed. These good looking Singles gave Zundapp a more comprehensive range, plus some time to develop its own four-stroke machines.

For the next two years sales were at a low ebb, but in 1932 the company brought out the B170 and B200 models with a unit-construction engine and gearbox. Sales picked up in 1933, and Zundapp was ready for it with a really remarkable range of machines.

First was the 198cc Derby that used a twin exhaust port engine to shove out 7 bhp. Next came the new 500cc (K500) and 600cc (K600) side-valve opposed Twins, which used a hand shifted four-speed gearbox and shaft drive. These 12.5 and 15 bhp models featured a pressed steel frame that was sweeping the German industry, and they set a new standard for appearance. A unique item of the Twins was a chain transmission, which was much quieter than a gear transmission.

The hit of 1933 was the new "Four," called the K800, which was an 800cc side-valve opposed Four that developed 22 bhp. This model was silky smooth, and its broad spread of power became a legend. The K800 was especially desired by the affluent who wanted the ultimate in prestige and luxury, as well as the sidecar men who liked the good torque at all engine speeds.

In 1934 an improved 200cc KK200 model was introduced, which used the new three-way scavenging design to develop 7.5 bhp. This luxurious 200 also featured the pressed steel frame and shaft drive. In 1935 the new Derby 200 was marketed, which retained chain drive and a hand shifted gearbox, but used the new pressed steel frame. These two-strokes were all noted for their stamina.

In 1936 Zundapp really warmed up to the challenge with a 500cc ohv model called the KS500. This opposed Twin punched out a strong 25 bhp, which

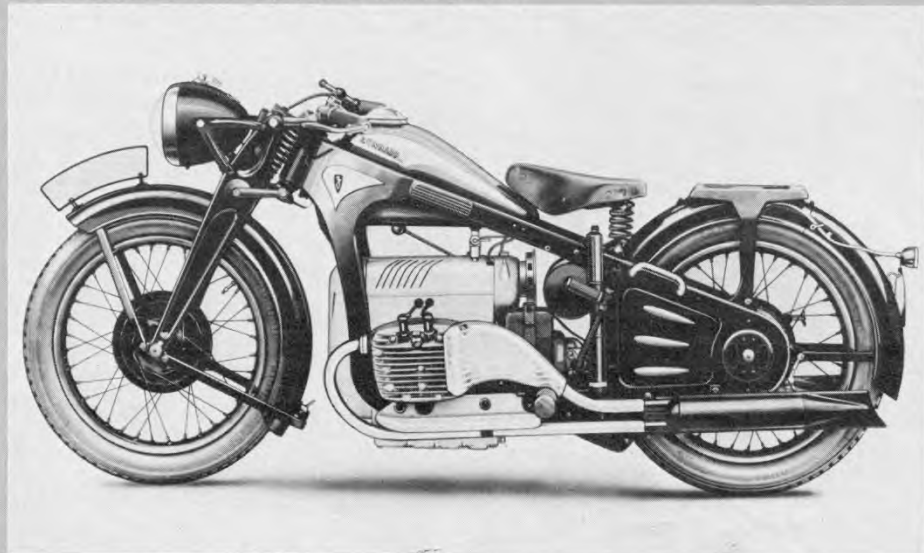
propelled it 80 mph. This was soon followed in 1938 by a 600cc sidecar model. Then, in 1942, a 750cc version was produced for military use that developed 26 bhp.

During the 1930s Zundapp produced a small airplane engine—one of which set several speed records. The research conducted into airplane engine design proved useful, with a great deal of knowledge being applied to motorcycle production. Up to the late 1930s Zundapps were known more for reliability than speed, and the company had a reputation for conservative designs of a non-sporting image. However, during the last few years before World War II, the company decided to seek a slightly more sporting image.

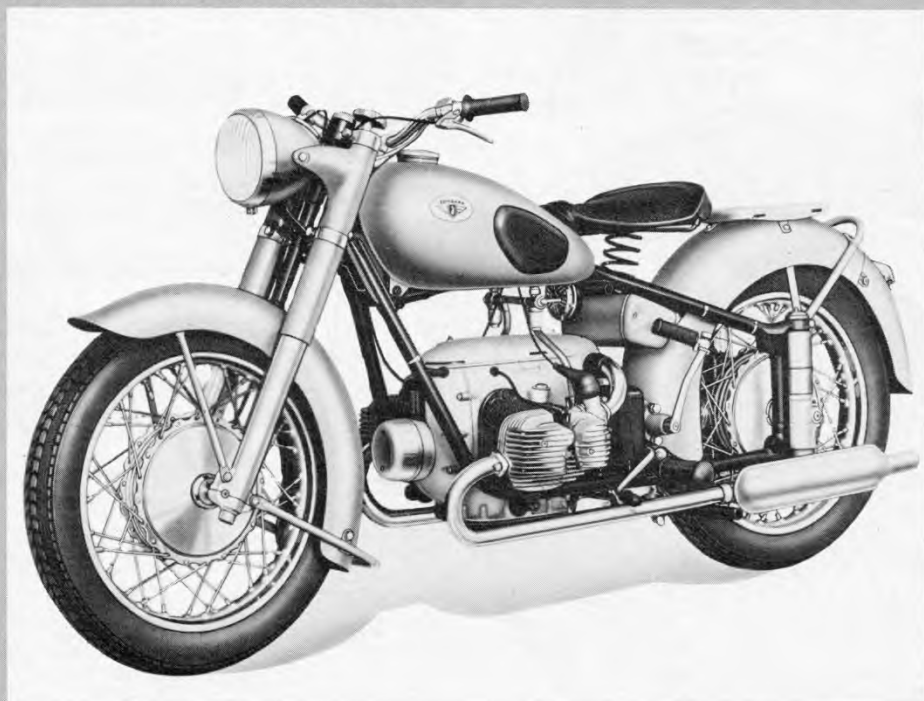
The first indication of this on the showroom floor was the DS350—an overhead valve 350cc Single introduced in 1938. The new thumper had a cleanly designed unit-construction engine with an alloy head and a four-speed gearbox. Hand shifting was dropped in favor of a foot shift, and the tubular frame and a pressed steel girder front fork provided a sleek appearance. The 17.5 bhp output provided enough performance to qualify the DS350 as a sports model.

During the middle and late 1930s Zundapp continued to win a great number of endurance races with its standard models. In 1934 Zundapp took the 1240 mile German Tour, and in 1936 it won the Paris to Nice run in the sidecar class as well as a win in the International >

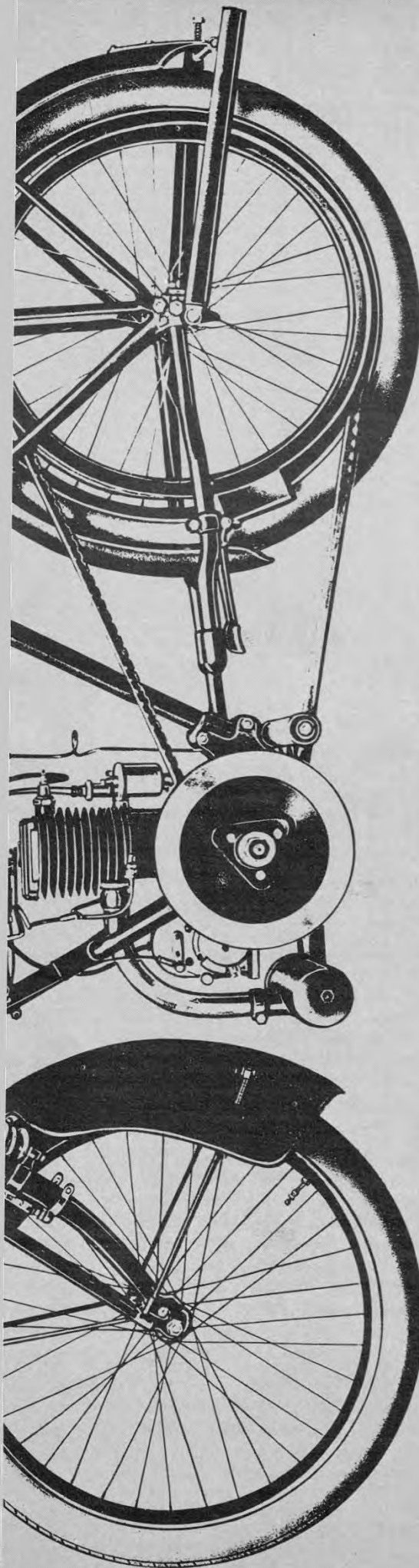
*The 1933 K800 was a luxurious 800cc Four with side valves and shaft drive. This 22 bhp model used the pressed steel frame popular in Germany then.*



*The 1952 KS601 was a smooth 28 bhp opposed Twin with shaft drive. This 90 mph roadster used a chain transmission that was very quiet.*







Race at Rio de Janeiro.

The following year proved to be outstanding, with nine Gold Medals in the International Six Days Trial plus solo and sidecar wins in the Swedish November Kanan. In 1938 a fastest time of the day was taken in the Loibi Pass Race, and in 1939 a great win was scored in the Schaerbeck 24 hour classic. These wins all emphasized endurance rather than speed, since the company lacked any real racers for the ultimate contests of the day.

There was, however, one very special racing machine built at the Nuremberg Works in 1938—the purpose of which was to capture the world's absolute speed record, which was held by BMW at 173.67 mph. The credentials of this monster were more than impressive!

The basic layout was an opposed four-cylinder overhead camshaft rig with a cool 1000cc displacement. A pair of vertical shafts and sets of bevel gears drove the cams, while a four-speed gearbox transmitted the power via shaft drive. A huge Roots supercharger was used, which provided a frightening 95 bhp at 7500 rpm. A special frame and front fork were produced, as was a sleek streamlined shell.

Unfortunately, the blown beast never saw the light of day. The war ended all that, but not before the engineers had calculated that their bomb would do no less than 243 mph. This speed would have shattered the world's record, as well as just about anything running today. Due to war damage, the factory was unable to locate a photograph of its great terror of 1938.

After the war the factory was slowly rebuilt, and soon a steady diet of various commercial and industrial products was rolling off the lines. The demand for such goods did not allow the production of motorbikes until August of 1947, at which time the DB210 was introduced along much the same lines as the pre-war model. In 1950, the bike was given a face lift with a telescopic front fork and a foot shift gearbox. A new factory was also built in Munich that year, its first task being to design a new range of machines.

In 1950, production of the KS600 28 bhp model resumed, which was virtually the pre-war model with the pressed-steel rigid frame, a girder front fork, and a modernized foot gearshift. This model had barely reached the market when it was discontinued and replaced with the KS601 model.

This Zundapp featured the reliable 600cc ohv engine, which had measurements of 75 by 67.6mm. The compression ratio was a mild 6.4:1, and the 28 bhp was churned out at only 4700 rpm. The big improvement was the suspension, which consisted of a telescopic front fork and a plunger rear suspension. The new frame helped boost

weight to 463 lb. This Twin proved to be a luxurious touring model, and for the first time the Teutonic machines were imported to America.

A super sport version with a warmed over engine came next. It produced 32 bhp on a higher compression ratio. The speed of the standard model was listed as 90 mph, while the SS version would crowd the century mark. The 600 was then offered in "Sports" trim, with a 33.5 bhp engine, upswept exhaust, knobby tires, and a racing seat and fenders for enduro or cross-country races. Few of these models ever found their way to America.

Next came an improved two-stroke—the DB202, which had a plunger suspension frame for more rider comfort. The engine churned out 7½ bhp at 4000 rpm on a 6.1:1 compression ratio, which gave a speed of 62 mph. A four-speed gearbox was also used.

During these early post-war years the marque had little time for competition, but by 1950 Zundapp did enter the ISDT with a 600 Twin, and Oskar Pillerstein achieved some fame with his home-built 600cc supercharged model in road racing events. In 1951, Zundapp riders won the Austrian Alpine Rally, as well as winning two Gold Medals at Varese in the ISDT. In 1952, four gold medals were taken in the ISDT, plus wins in the 24 Hour Warsaw race and the Paris-St. Etienne event. In 1953, one gold was taken in Wales, and then in 1955, three golds, one silver and one bronze were taken in the ISDT in Czechoslovakia.

Meanwhile, the designers had been busy in Munich. In 1953, the production of Bella 150 and 200cc scooters was begun, as was a 50cc "Moped." In 1954 a radically new "Elastic" model was introduced, which had a 250cc, 13 bhp engine slotted into a space frame with swinging arm suspension. This two-stroke Single was followed by the "Sabre" in 1956, which used radial fins on the head. These latest Zundapps were much more modern looking than the older DB series, although the 12 bhp Enduro DB still continued to be respected in all types of cross-country races.

During these years Zundapp had designed a pair of really remarkable motorcycles called the Jet Boxer and Super Jet Boxer—opposed Twins in 250 and 350cc sizes. These ohc engines produced 24 and 30 bhp for speeds of 90 and 100 mph, but the unusual thing was the swinging arm suspension both front and rear. With very full enclosure of the wheels and frame, the Boxers presented a sophisticated and unexcelled specification.

Unfortunately, the Boxer, along with a great number of good German ideas, never really got to the people, due to a profound change in the economic pic-

ture. Because of remarkable industrial growth, Germans could now afford to own an automobile. As a result, sales of motorbikes took a dramatic drop after 1955, which prevented the Boxer from ever being marketed. Zundapp responded to this by introducing its 50cc Falconette, which could be had in several models. The idea was that every car owning family plus school boys could afford and use an inexpensive motorbike around town, and this move proved to be eminently successful.

The larger 250 and 600cc models were continued to the late 1950s, at which time they were dropped. By 1959, the 600 had become somewhat obsolete, but the 250cc Trophy S model with 14.5 bhp was still considered to be a good bike. Under the direction of Dr. Eitel Mann, it was decided to sell the Nuremberg works in 1958 and concentrate on developing the new lightweight models at Munich. The company also decided to put tremendous support behind the sporting events in Europe—a philosophy that continues today under the guidance of Frau Elizabeth Mann.

In 1956, Zundapps took no less than nine Gold Medals, six Silvers, and two Bronzes in the ISDT at Garmisch, plus dozens of wins in German and other European cross-country and enduro events from 250 to 750cc. In 1957, the score was six Golds, 1958 had five, 1959 had three, 1960 had four and 1961 had five. During these years Zundapp forged an enviable record in cross-country and enduro events, which included five straight open class champions with its big 600cc Twin.

During the 1960 to 1965 era Zundapp devoted its efforts to 50cc models, which included everything from mopeds to motocross mounts. The rugged little buzz-bomb with a bore and stroke of 39

by 41.8mm churned out 5.5 bhp, and could be had in three, four or five-speed versions. With a weight of 157 up to 180-lb., performance was impressive, and the ease of riding introduced thousands of new riders to the sport. The little 50 was soon augmented by a 100cc (50 by 50mm) version, which produced 8.5 bhp and weighed 196 lb.

These tigers were extremely durable under cross-country conditions, and their record is almost unbelievable. In 1962, they took all seven German cross-country championships, were the best works team in the ISDT, had two riders on the Silver Vase team, and for the first time in its history a 50cc model finished the November Kassen in Sweden—generally regarded as the toughest enduro in the world.

In 1963 and 1964, the marque held the Alpine Cup, won many cross-country titles, and won the tough Valli Bergamasche Trial. In 1965, the record included the best 50cc in the Isle of Man ISDT, the Alpine Cup again, plus the Henry Groutar Cup (unofficial European trial champion). Gustav Franke convincingly won the European Trials title in 1966, and in 1967 he finished a strong 2nd. In addition, Zundapp won literally hundreds of 50 to 100cc cross-country and enduro events.

The year of 1968 was probably the greatest, though, since the works team of Andreas Brandl, Volker Kramer, Heinz Brinkmann, Siegfried Gienger, Lorenz Specht and Dieter Kramer won the prestigious ISDT World Cup for manufacturers with their 50, 75, 100, and 125cc Singles. The trial was at San Pellegrino, Italy, that year, and when the dust settled Zundapp was the envy of the world.

In the rugged German events Zundapp riders took the 50, 75, 100 and

125cc cross-country championships, plus the trials championship for the sixth year in a row. In the other European enduro type events Zundapp was considered to be the marque to beat.

All of this publicity naturally helped sales, which gave the company the motivation to improve its bikes and expand its range. Soon the 50cc models could be had in moped, super sport or enduro trim, which was then expanded to an improved 100 and a new 125cc model in 1970. The KS125 was a well-designed sports model that looked like a small road racer with lights. The 15 bhp Single featured a radially finned head, five-speed gearbox, full width 6-in. brakes, a weight of 231 lb., and a speed of 75 mph. The KS125 could be had in a wide variety of models for just about everything, and it became known for its stamina and quality, just like the other Zundapps. The 125cc engine has subsequently been used by other manufacturers for special sports and competition models, such as the famous Rickman Metisse concern in England. The 6¼ bhp, 50cc model continued to be popular, as were the 75 and 100cc versions.

In competition the marque continued to excell, winning eight Golds in the 1969 ISDT and finishing 2nd only 9-sec. behind the winner. Gustav Franke also finished 4th in the European Trials Championship, and the company took its 7th consecutive German trials title plus many cross-country wins.

In 1970, the marque again took the ISDT trophy for manufacturers, five classes of the German trials and cross-country championships, plus many wins in the European 50 to 125cc motocross events. The 2,000,000th Zundapp left the factory that year.

*(Continued on page 84)*

*In 1965 Zundapp set 14 world records at Monza with this sleek 50cc streamliner. The speeds ranged from 100.81 mph for one hour to 85.18 mph for 12 hours.*



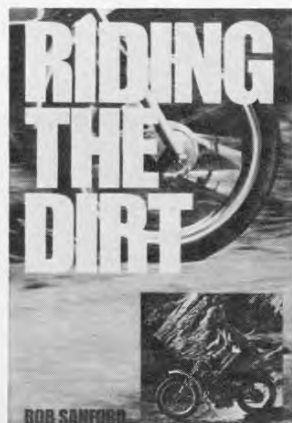
*Zundapp has an enviable record in the ISDT where stamina counts. The factory has won the world trophy on several occasions.*





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# Zundapp

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In 1971 the record was much the same, except that Zundapp entered a team in the new 125cc motocross championship—taking the first three places. By then the 125cc Gelandesport (cross-country) model was regarded as the toughest little buzz bomb Europe had ever seen, with many top trials and enduro events being dominated by Zundapp riders.

During the long history of Zundapp the company almost exclusively concerned itself with competing in "dirt" competitions or endurance events on pavement. There was, however, one exception to this policy, and that was in 1965 when it built a remarkable little speed record model.

In an effort to impress the world with the quality of its wares, Zundapp built a 50cc record machine to attack several of the long distance marks. A standard 50cc engine was used, but it was modified for the runs by using a transistorized ignition plus meticulous assembly. The standard five-speed gearbox was hooked up to an auxiliary two-speed box, so that 10 ratios were available to the riders.

The 5.2 bhp engine was then dropped into a longish frame, which used gas filled rear shocks. The reasoning was that the constant pounding for up to 12 hours would alter the suspension characteristics as the oil in an orthodox shock heated up.

The runs were made at the Monza speed bowl, and the tiny streamliner seemed almost pitiful screaming around the huge corners and long straights. The shell had been designed at the Munich Technical Institute, and it was a beautiful thing with a narrow and low profile for splitting the wind.

When the shrieking little 50 was shut down at the end of the runs, Zundapp had 14 new records to its credit. The shortest was the 62 mile mark at 95.1 mph and the longest was the classic 12-hour mark at 85.18 mph. The 1-hour record was a remarkable 100.81 mph, and the 6-hour record was a cool 91.8 mph. The team of H. Rosenbusch, V. Kramer, P. Eser, A. Brandl, A. Lehner and G. Sengfelder had the satisfaction of breaking many records in the 75, 100 and 125cc classes—and with only a 50cc Single!

For Zundapp, using a conservative approach has paid off. It has built a magnificent record upon sound engineering and craftsmanship of the highest order...a record which includes 9923 FIM Gold Medals from 1921 to 1972. If that's not enough to impress you, add one fact: Zundapp has never built an exotic works racer!