

FIRST MOTORCYCLES IN RUSSIA



Russian 1903 Rossia with German Werner engine

A 1912 Dux.
Displacement: 294 cc.
Power: 2.5 hp.
Speed: 60 kph.



Almost nobody nowadays remembers the Leitner factory. It was located in Riga and began producing bicycles called Russia in 1886. Like many other well-known bicycle manufacturers, it yielded to the temptation to try its hand at producing motorcycles. The first five machines were ready in early 1899. They were tricycles with French-built De Dion Bouton 1.25 hp engines. A little later the factory started to turn more sophisticated machines of the Russia mark. They were driven by German-made Fafnir 1.5 hp engines. One of these machines still exists and is in the possession of a collector Yu. Rambu who lives in Riga.

Another Russian bicycle works, Dux, in Moscow also tried to build motorcycles. Between 1910 and 1913 it produced machines with Swiss-built two-cylinder Motoreve engines of 2.5 hp.

Inasmuch as the motorcycles of that time had foreign-made engines, Russia and Dux cannot be considered a complete product of this country. The first motorcycle made entirely in our country was the Soyuz built in 1925, exactly half a century ago.

It was designed by four engineers at the Dux plant: E. Gropius, P. Lvov, A. Sedelnikov, and I. Uspensky. The planning stage began in February 1924 and assembly was completed on the eve of 1925. The new machine was tested the same year.

The Soyuz had quite a number of innovations which were original for that time: inclined arrangement of the cylinders, sprung rear wheel as well as the front one, and the frame forked under the engine. The inlet valve was placed above the exhaust one, the gearbox was of the stepped type and the front fork operated as a pendulum. The fuel tank carried 9 litres of petrol and the wheel axles were spaced 1,240 mm. The large-diameter wheels (tire size 26x3 inches) and considerable road clearance (200 mm) enabled the Soyuz to negotiate off-road terrain.

The great grandfather of Soviet motorcycles, the Soyuz remained a prototype and never reached the assembly line. But it started a large family of new machines designed and built at Soviet plants. The work of the group of engineers headed by P. Lvov was carried on by P. Mozharov, an experienced designer. Under his supervision, five motorcycle models were designed at the end of the 1920s for Izhstalzavod. They included two twin-cylinder models of the 1,200 cc class and three machines with displacement volumes of 750, 500, and

200 cc. The most interesting of the five prototypes built in 1929 was IZh-1 with gimbal gear. It was distinguished for its pressed frame, V-engine, easily dismantled interchangeable wheels and front fork of the Neander type. The lower hollow beams also functioned as exhaust pipes. The machine was designed to take a side-car.

Although the IZh-1 turned out to be a reliable and promising design, its commercial production failed to materialize. It was not until four years later that Izhstalzavod began to turn out IZh-7 motorcycles, simpler and less expensive than the IZh-1. The IZh-7 was a replica of the L-300 model already being manufactured commercially by the Tremass Works in Leningrad. The first experimental batch of 25 light machines with a two-stroke engine was assembled there in September 1930. So actually it was the small Tremass Works that became the pioneer of commercial motorcycle production in our country.

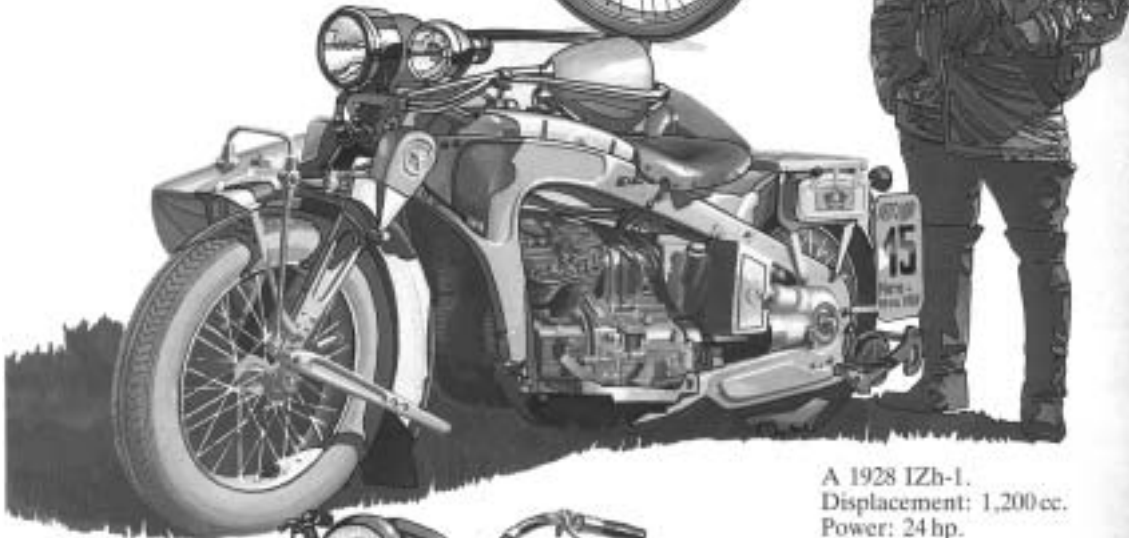
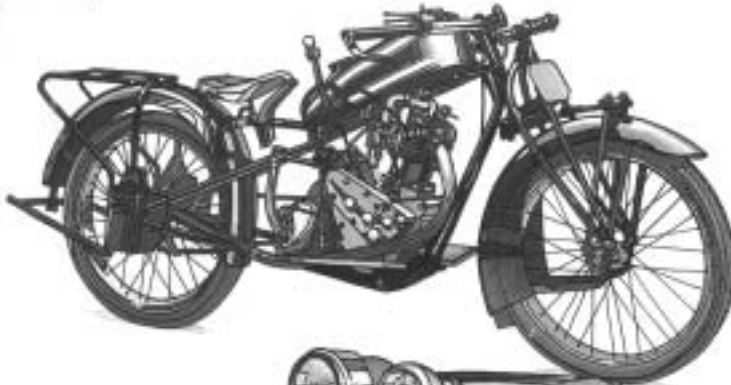
The Tremass L-300 was designed again by Mozharov. This model of his also had a pressed frame. However, the engine this time was a single-cylinder with 300 cc displacement volume. But Mozharov deviated from his favourite design—V-engine and the front fork with a spring—only temporarily. He returned to it in 1933 while working on the PMZ A-750 model which subsequently was produced by the Podolsk Mechanical Plant.

In 1933, Tremass handed over the whole production of the L-300s to another Leningrad plant—Krasnyi Oktyabr—which manufactured them till 1939. Later on neither of them ever returned to motorcycle production. Izhstalzavod carried on however. Today IZh motorcycles are well-known not only in the USSR but in many other countries as well.

Some Tremass L-300, Krasnyi Oktyabr L-300, and PMZ A-750 machines have been handed down to us and are now on display at the Polytechnical Museum in Moscow. The prototype of the Soyuz is the only one not to survive but we can get an idea what it was like from some old photos.

Today our country has seven big motorcycle factories where motorcycles, mopeds, motor scooters, and sports machines roll off the assembly lines in large batches making the USSR second in the world for their total output.

A 1925 Soyuz.
Displacement: 502 cc.
Weight: 127 kg.
Speed: 70 kph.



A 1928 IZh-1.
Displacement: 1,200 cc.
Power: 24 hp.
Weight: 300 kg.
Speed: 65 kph.

A 1933 PMZ-A750.
Displacement: 747 cc.
Power: 15 hp.
Weight: 206 kg.
Speed: 100 kph.



A 1931 L-300.
Displacement: 243 cc.
Power: 6 hp.
Weight: 125 kg.
Speed: 80 kph.

