

Everything you want to know about the new King Kawasaki Z1000.

Kawasaki has had a winning superbike in the Z900 for four years but all that time its successor was being developed to be a bigger and better Z machine. Now the Z1000 is here. Kawasaki's Chief Engineer "Ben" Inamura tells you how it was done through planned engineering evolution.

Move over Z900, new King Kawasaki Z1000 is here!

Z1000: Why it is what it is

The Kawasaki Z900 was the realization of a Kawasaki concept that goes back to 1967. It was early in that year a small group of engineers headed by Gyoichi "Ben" Inamura in Kawasaki's Research Department, conceived the idea of a high performance motorcycle with a large displacement multi-cylinder engine of a type never before marketed by a Japanese manufacturer.

Their challenge was to design and build this engine within very limited dimensions and to make it run as cleanly and quietly as possible on lead-free fuel. It included a serious attempt to reduce air pollutants by using the blow-by anti-pollution system which reduces hydrocarbon emissions by 40%.

The engineers decided on the transversely mounted in-line four cylinder layout because it offered the most compact design and was almost vibration-free. The unit fires two times per crankshaft revolution for remarkably smooth operation.

Kawasaki went all the way and adopted the DOHC concept because it is the most efficient, and a source of more power and torque than any other mechanism. Kawasaki's technological ability has always been high in the state of the art and this plunge into DOHC production made history for motorcycles in the 900 cc class. The sophisticated design also had excellent serviceability. In fact, all parts could be exchanged except the crankshaft and transmission, with the engine on the frame.

In September, 1968, a complete motorcycle was made up in wooden mock-up form. It was at this point in the history of the development of the big, new Kawasaki that it suffered a blow that nearly killed it: the Honda CB750 was revealed at the Tokyo Motor Show for delivery in 1969. It was one of the best-kept secrets in the

motorcycle industry.

It was a coincidence that the two factories came up with a 4-stroke 4-cylinder engine at the same time, but the undaunted Kawasaki representatives investigated the market potential for a second 4-stroke 4-cylinder machine. Considerable research proved there was indeed a market for an alternative maker. Kawasaki engineers, after evaluating the Honda, continued development of their own superbike project with some more very definite ideas as to what it should be.

First prototype in 1970

The first prototype was ready for testing at the Yatabe Test Course near Tokyo in the spring of 1970. It was based on the original concept: a large capacity DOHC 4-stroke 4-cylinder engine, but was still significantly different from the Honda CB750 in many ways. It was 900 cc in displacement and Kawasaki adopted the greater efficiency DOHC top end, and wet sump which is a first in this class of motorcycle. The CB750 had SOHC, a dry sump system, and 67 hp. The Kawasaki developed considerably more power.

Final testing in September, 1971

An exhaustive testing program got underway with the assistance of two American test riders who were to give valuable information on ease of serviceability and many other considerations which would help make the new machine a more practical motorcycle. After a thorough evaluation, final design changes were made, and all that was required was the approval to go ahead with production.

It was a momentous occasion at the factory when model "X", alias T103 (the factory code number) went quickly into the works, and the first pre-production models were available for shake down tests in February, 1972.

A special team of riders tested those motorcycles like no Kawasaki had been worked over before: the treatment was murderous. Endless track testing and long distance runs were made. Every nut and bolt was checked in the thorough search for any weakness. However, the test bikes came through—battered but not beat. They had endured the toughest punishment. Minor changes were made before the machines went into full production. And Kawasaki Z900 was born.

