

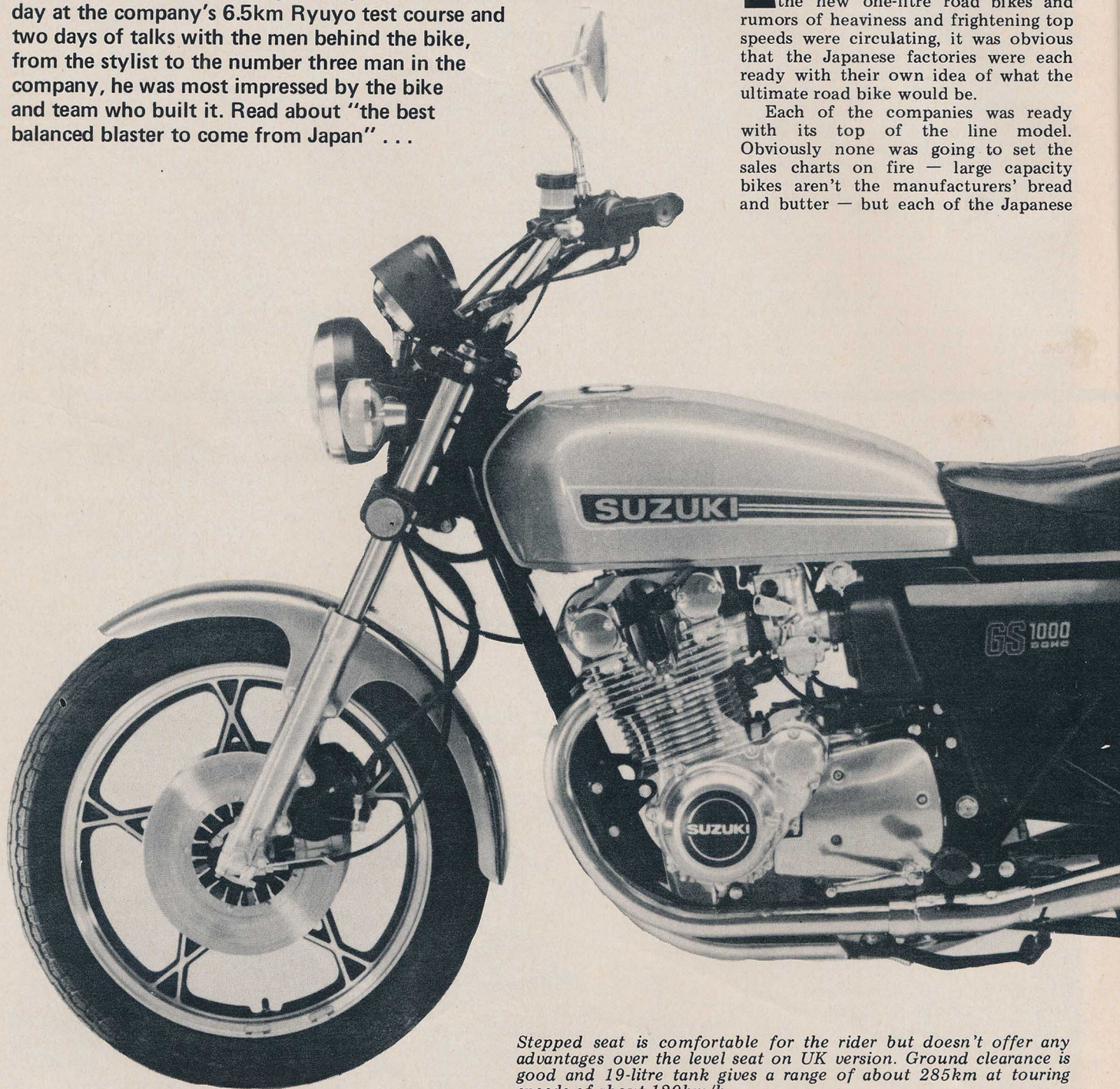
SUZUKI GS 1000

FROM THE INSIDE

TWO WHEELS Editor Jeff Brown flew to Japan recently for a preview of Suzuki's big four-cylinder. After a day at the company's 6.5km Ryuyo test course and two days of talks with the men behind the bike, from the stylist to the number three man in the company, he was most impressed by the bike and team who built it. Read about "the best balanced blaster to come from Japan" . . .

LAST JANUARY, when fortunate riders sampled the first examples of the new one-litre road bikes and rumors of heaviness and frightening top speeds were circulating, it was obvious that the Japanese factories were each ready with their own idea of what the ultimate road bike would be.

Each of the companies was ready with its top of the line model. Obviously none was going to set the sales charts on fire — large capacity bikes aren't the manufacturers' bread and butter — but each of the Japanese



Stepped seat is comfortable for the rider but doesn't offer any advantages over the level seat on UK version. Ground clearance is good and 19-litre tank gives a range of about 285km at touring speeds of about 120km/h.

Big Four had its image leader ready; and each entrant in the one litre war showed just how the factories interpret the needs of the market. Each bike is tinged with a bit of fantasy — after all, they are the flagships of their lines — but apart from the fact that three are fours and one is a six, they are as different a bunch of competitors as buyers could hope for.

There's Honda's Magnum Six, 268kg of "six-upmanship", a 24-valve head and a price of about \$3750. The Kawasaki Z1R, the old Z1000 with big carbs to bring back the performance of the Z1B, and wrapped in bodywork designed by a US styling studio which unfortunately reduced the size of the fuel tank. And Yamaha's XS1100, huge, bulky and fast as a shell in a straight line and with its shaft drive, more of a Honda Gold Wing competitor than a serious sports bike.

And there's Suzuki's GS1000, a bike which looks conservative compared to the wildly extroverted natures of the other one-litre bikes, but which has a heart and soul that's pure, easy to use performance. Quite simply, as a sports

machine the GS1000 has it all over its competitors, not only because it doesn't have any gimmicks, but also because it's innovative in important but not readily noticeable areas, like the frame, suspension, tyres and brakes.

Suzuki flew me to Japan to test the GS1000 and also to ride an SP370 prototype and inspect the Suzuki factories (full stories next month) and it was a relief to me to find the GS1000 such an excellent bike, in light of the overwhelming hospitality Suzuki showed me.

At a meeting with the heads of all the departments involved with the design of the GS1000, Mr T. Watanabe, General Manager of the Products Planning Division, said that Suzuki had three primary aims when planning the GS1000: engine performance, good handling and riding comfort, in that order. He said the design team aimed for the best functional performance and weight reduction was picked as one of the targets to achieve this. That they succeeded is shown by the GS1000's weight of 234kg, only four kilograms

heavier than the GS750, itself a very quick bike.

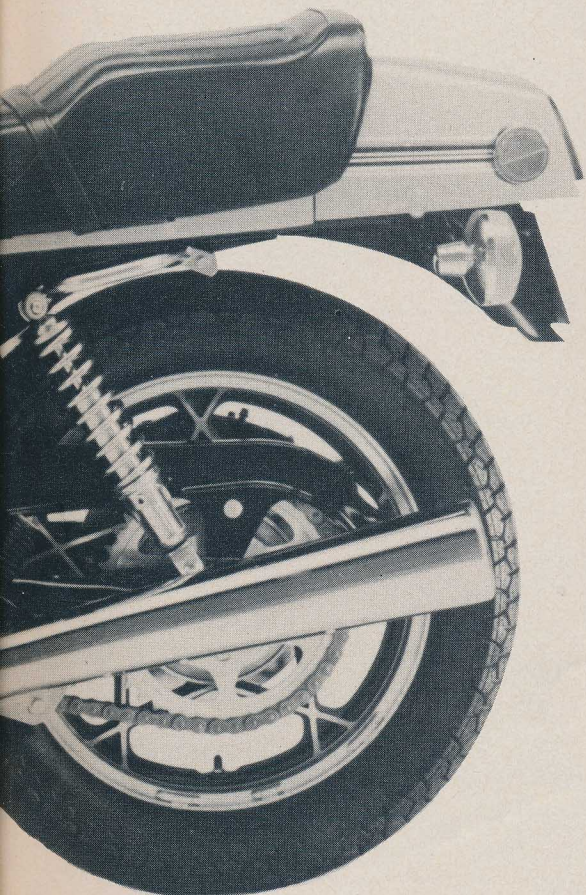
At the heart of the GS1000's good manners is the suspension; air forks (developed from experience with the factory RG500 racers) grace the front end, while the swingfork turns on needle roller bearings, with the oil-damped rear units adjustable four ways for damping as well as having five spring preload adjustments.

New tyres, 3.50 V19 front and 4.50 V17 rear, were jointly developed by Suzuki, Inoue, Bridgestone and Dunlop for the GS1000, and are V-rated, for speeds above 210 km/h — necessary because of the bike's performance which makes 160 km/h feel like 80 km/h on last year's superbikes!

The 997cm³ four is oversquare at 70 x 64.8mm, so that larger valves could be used, and also to enhance engine durability. Power peaks at 65kW (87bhp) at 8000 rpm and peak torque of 85Nm (63 lb-ft) is at 6500 rpm.

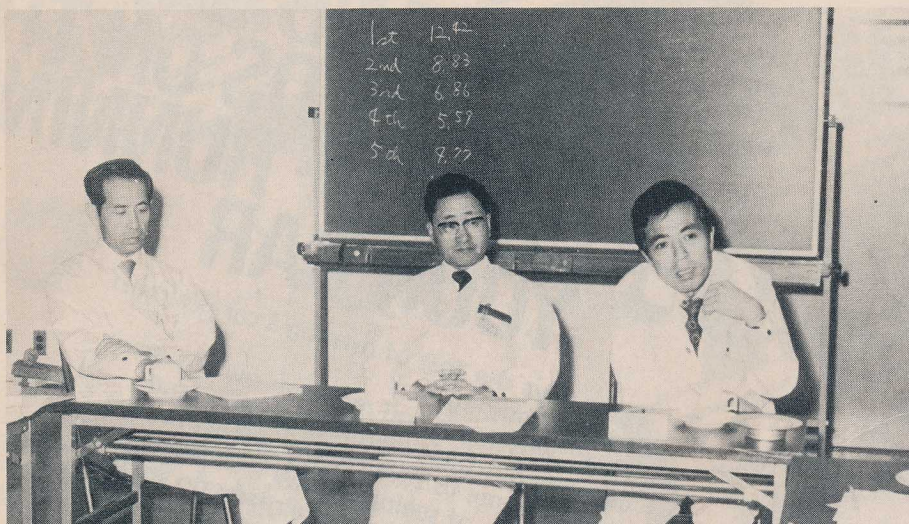
The drive train received a lot of

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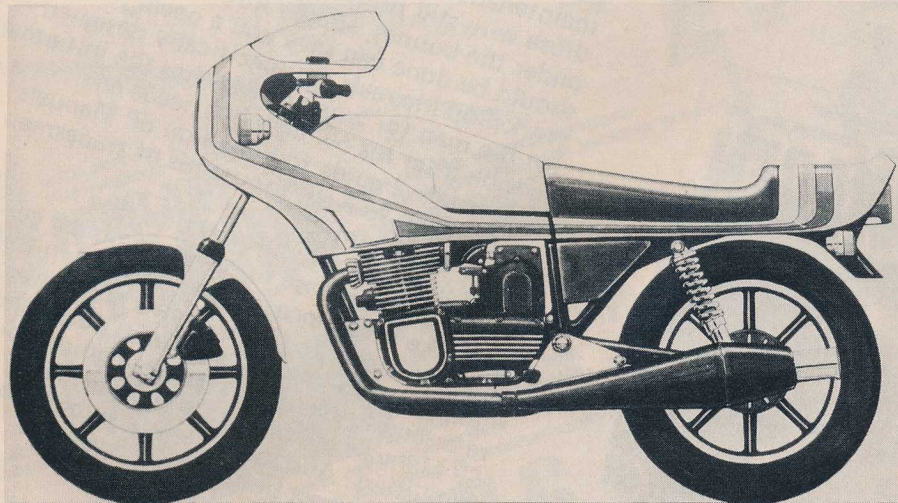


Editor Brown (in his red and white DBT leathers) with Mr S. Hashimoto, Assistant Manager of the Planning Department, and an engineer, looking the GS1000 over after the first test session.

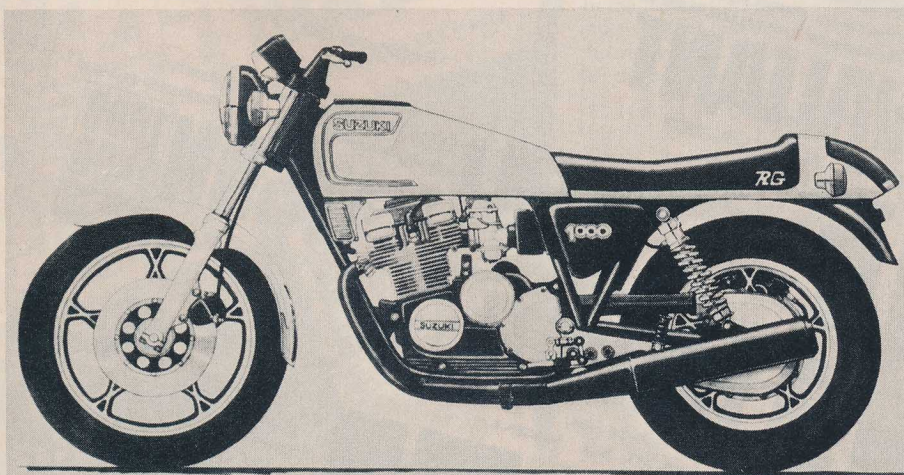
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Left to right, Mr T. Watanabe, General Manager Products Planning division, Mr Y. Nakano, director and Mr T. Hirano, Oceana Manager, at a conference on the GS1000.



One of the early design drawings of the GS1000. Note shaft drive, fuel injection and sports fairing and seat. Production GS1000 has an optional bikini fairing.



Another design sketch, incorporating enclosed chain drive, air rear units and an oil cooler. These items were dropped from consideration to reduce weight.

attention to ensure smoothness of operation and long life and the drive sprocket has rubber and plastic damping and a 630 chain rides on it. The chain is the same size as the one used on the GS750, but is made from better quality metal and is permanently lubricated and sealed with O-rings.

Some of the other features are the cast alloy wheels, designed and developed by Suzuki but cast by an outside firm, the fuel gauge set in the tachometer face and the dual horns, a very necessary item on a machine capable of speeds above 210 km/h.

The riding? A dream. On Suzuki's 6.5km Ryuyo test track the GS1000 proved itself to be possibly Japan's best sports bike, one that can challenge Europe's best and yet still be docile and supremely easy to ride. The GS1000 feels light, and tight and rigid in the frame, with supple, well-controlled suspension which is well up to the bike's shattering performance. A very inspiring package.

The drive train is smooth and with the stability (aided by the 4.50 17 rear tyre) and engine smoothness, as well as the comfortable seat and good controls layout, the rider is very well catered for. Rubber mounted mirrors are another minor feature which show their value early; the mirrors stay clear until about 180 km/h — very necessary if you're going a little over the speed limit!

Power and torque development is also very smooth. Power comes on with a big push at about 5000 rpm, but the engine develops usable muscle in top gear from 2500 rpm. It will run almost to a standstill and accelerate away again in top, and driveline snatch is minimal. My indicated top speed on the Ryuyo track's straight was 217 km/h. That was about 500 rpm short of the redline, but the really impressive part was how quickly speeds in that area were hit. We'll have to wait until we test a bike in Australia before we can record acceleration times, but a mid 11-second standing 400m is on the cards and the 0 to 200 km/h time will be a mind-blower.

The brakes, twin discs at front and a single at the rear, couldn't be faulted in the dry conditions at the test track, with plenty of feel and power that enables both wheels to be held almost locked up, with tyres chirping, from 210 km/h to a standstill. They were as powerful as Brembo cast iron units I've used on Ducatis, but felt a lot easier to control. The Suzuki engineers also said that though the discs are stainless steel, new pad material has enabled the brakes to beat steel units in both wet and dry conditions.

Briefly, that's the GS1000. We'll have a full test and specifications, as well as design history and comments from the men who designed the bike, in TWO WHEELS May, as well as our impressions of the SP370 four-stroke single I was allowed to ride in prototype form. *