

The "Sports" model 75 c.c. o.h.v. Italian Laverda, built at Breganze. It is said to be capable of a maximum speed of 54 m.p.h. coupled with a fuel consumption of 140 m.p.g. On the right is a performance chart constructed from figures given by the Italian journal "La Moto."

CONTINENTAL REPORT

By JOHN THORPE

IT is really surprising that so few British riders evince interest in the fascinating "under-100 c.c." class. There is joy in handling a really good "ultra-light," and it requires far greater driving skill to use the available power to the best advantage. By comparison, the user of a "500" is a mere lorry-driver. . . .

These thoughts spring to mind after a perusal of a test, carried out by *La Moto*, of the 75 c.c. o.h.v. "Sports" Laverda, a high-quality Italian machine produced by Moto Laverda, of Breganze. There are three variations of the basic design—the touring, sports and M.T. models. All have an over-square (46 mm. by 45 mm.=74.75 c.c.) engine with unit-built gearbox; telescopic front forks; swinging-fork rear springing . . . in fact, "all mod. cons."

Both cylinder and barrel are of light alloy; lubrication is by gear pump from a quarter-gallon oil compartment cast into the bottom half; ignition by flywheel generator, which supplies current to an external coil. The make and break mechanism is driven from the left of the camshaft.

Wheels are of 20-in. diameter, and carry 2.375-in. tyres at front and rear. Both brakes are of 5½-in. diameter with linings .8-in. in width. On the touring and sports machines, a tank of just under 2-gal. capacity is featured, increased to 2½-gal. on the M.T. model.

The touring model produces 3.7 b.h.p. at 6,500 r.p.m. (piston speed 1,920 ft. per min.) and has a top speed of 40 m.p.h., combined with a fuel consumption of 170 m.p.g. The "Sports" machine can provide 4.7 b.h.p. at 7,500 r.p.m. (piston speed 2,220 f.p.m.), giving a 54 m.p.h. maximum with a consumption of 140 m.p.g. Most powerful of the trio is the M.T. ("Milano-Taranto") which turns over at 8,600 r.p.m. (piston speed 2,580 f.p.m.) to give a power output of 5.5 b.h.p. This version can reach 60 m.p.h., at the cost of a fuel consumption raised to 124 m.p.g. Undoubtedly to aid flexibility, the M.T. has a four-speed gearbox—the other two versions function on three ratios. Apart from differences in cam contours and internal tuning, the increase in performance appears to be gained by stepping up the compression ratio and increasing the carburettor choke

size, comparative figures being, respectively, 7 to 1 and 15 mm.; 8 to 1 and 16 mm.; and 9.5 to 1 and 18 mm. In each case, the machine weighs just over 150 lb.

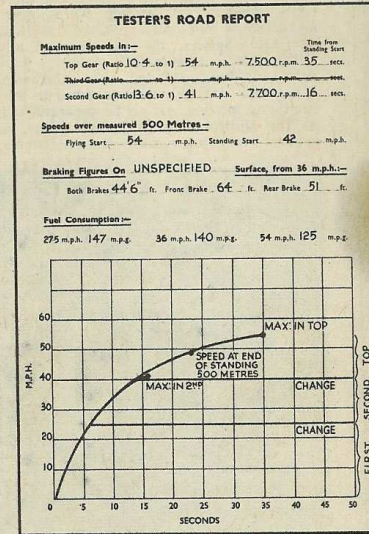
Such figures, however, do not tell all the story, and thus actual test results are of great interest. They were obtained by an Italian journalist—Enrico Benzing—who is of average height and who weighs 11 stone. The accompanying graph is reconstructed from the Italian figures and the maximum top gear speed quoted thereon is that obtained with the rider "on the tank," comparative figure for a normally-seated rider being 51 m.p.h. Restricting the engine speed to 6,500 r.p.m., second and top gear figures of 34 m.p.h. and 47 m.p.h. were obtained with the rider sitting up.

Braking figures were taken from a higher speed than is normal in British tests and additional data was obtained for the stopping distance from maximum speed (54 m.p.h.). These showed that the Laverda could be brought to rest in 115 feet from that speed with both brakes in operation, the front brake figure being 190 feet and the rear 135 feet. On the strength of these two sets of figures, I would expect a stopping distance close to 30 feet from 30 m.p.h. with both brakes.

In his report, Enrico Benzing speaks highly of the machine's stability and of its effective front springing. However, it was felt that there was room for improvement in the hydraulic spring units controlling the rear suspension.

The Laverda's ability to tuck away the miles was praised. On the long, flat, fast *autostrada* of the Lombardy Plain, the little machine proved quite capable of covering over 150 miles inside four hours, and the 70-mile stretch from Brescia to Milan was covered, with the throttle wound against the stop all the way, and the rider keeping fairly well down, at an average of over 50 m.p.h.

Vibration was pretty well non-existent, and the engine gave no trouble in the course of a 1,200-mile road test. In city traffic, however, fairly high revs. had to be used to obtain a reasonable degree of acceleration, and the tester suggests that a four-speed gearbox would be a considerable improvement to an outstanding little machine.



PUCH POINTS

BRAKES of quite large dimensions—nearly eight inches in diameter with a lining 1½ in. in width—are a feature of the Puch SGS. Braking efficiency is quite high, and in the course of the test recently carried out by *Das Motorrad* a figure of 20 ft. from 25 m.p.h. was achieved. From slightly under 40 m.p.h., this increased to about 48 ft.

Considering that it is officially stated that, from such a speed, the average vehicle requires no less than 80 ft. in which to come to rest, Puchs can feel quite pleased with themselves. Or, of course, some official can start revising his figures!

LIKE it or not, the petrol tank is usually the most distinctive feature in a motorcycle's external make-up, and after a few years the chrome on most tanks is beginning to lose that pristine look. But it is no light matter to replace an expensive component which is, in all other ways, thoroughly serviceable, just for the sake of a spot of chrome.

In the Model SGS, the Puch people have overcome that problem in a very neat fashion. The tank has plated side panels, and these have been made detachable. If the chrome begins to lose its sheen, one simply unscrews the panel and purchases a replacement—far cheaper than buying a new tank!

NEW SWEDISH SCOOTER

THE cult of the ultra-light scooter has spread to Sweden, where one of that type of pedal-assisted runabouts which originated in Italy is now being constructed. The frame and bodywork is, I gather, of Swedish design, but the machine—known as the Piccolo—is powered by an Italian Eolo engine, of 49 c.c. capacity.

