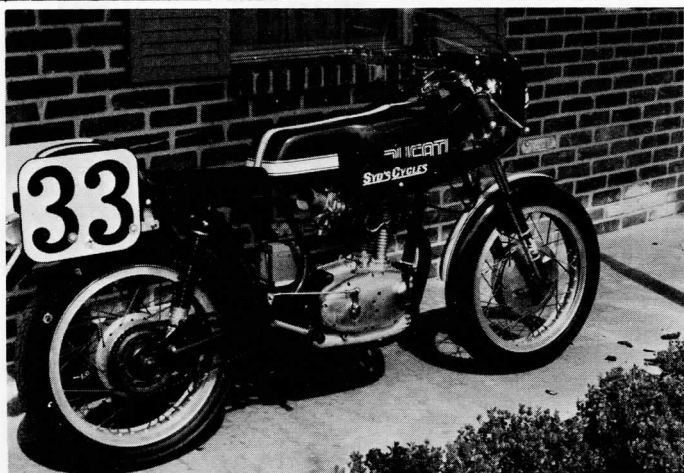


SINGLES SPOT

produced 25bhp at 9,000rpm, with roadster and racing variants of each model. Later the two smaller road bikes grew to 160 and 200cc. The desmo engine didn't appear until after Ducati had entered Grand Prix racing with a dohc version of the 125cc Gran Sport in 1956. Although this produced a healthy 16bhp, it wasn't quite quick enough to catch the MV's and Mondials which dominated the 125 class. So Taglioni turned to the idea of desmodromic valve operation. The advantages of this system, where the valves are closed mechanically by extra cams and rockers instead of springs allowing the use of wilder cam timing without the fear of valve float at high revs, had been recognized for years but no-one had managed to put them into practice in motorcycle engines.

Prototypes of Taglioni's first desmo engine with its triple-cam head (both closing lobes were on the central camshaft) produced 17bhp at 12,500rpm. And, more important, it proved to be amazingly reliable. Hundred-hour bench tests at full throttle resulted in no drop in performance and during track testing it was over-revved to 15,000rpm without damage.

By the 1958 season the 125 desmo single was pounding out 19bhp at 13,000rpm, which was enough for 110mph. That year was the most brilliant, but also the most unlucky, for Ducati's racing team. The



This competitive 250 is equipped with Syd's Cycles equipment and is raced at local races in Florida.

desmos dominated the Italian championship, took the first five places in the Italian GP and also won at the Belgian and Swedish rounds. But two of Ducatis star riders were injured and MV went on to win the world title.

For 1959 the team was strengthened by an up-and-coming youngster called Mike Hailwood, and Taglioni had by now come up with a beautiful little 125 parallel twin desmo developing 22.5bhp at 14,000rpm. But the results failed to live up to such promise and Hailwood scored the only GP win, on a single. The factory gave up racing at the end of the year, with Hailwood continuing to have considerable success on a single in 1959, however.

In the meantime, the factory had not yet applied the desmodromic principle to their road bikes. In fact they wouldn't do so for almost ten years. But the engines in the road machines that Ducati were turning out in thousands still bore a close resemblance to the racers, apart from their single cam, valve spring heads. The motor kept on growing with an increase of the bore and stroke from the 200's 74 x 57.8mm to 76 x 75mm, producing a capacity of 340cc. Later still, another version over-bored to 86mm became the 450MkIII with an actual capacity of 436cc. Not only engine performance

benefited from the single's racing heritage; the amazing handling qualities of the ultra-lightweight roadsters have always been treated to superlatives by owners and road testers alike.

When the desmo roadsters finally appeared in 1968, they brought still more mechanical refinement. The actual design of the valvegear differed from that of the '50s racers, having only a single camshaft with four lobes, operating the valves through two pairs of parallel rockers. A new frame with a twin loop rear section, much stiffer than the spindly older models, made the handling even more precise and secure than before. The engine cases were redesigned with wider mounting lugs to fit the new chassis layout, and the sump enlarged to take five and a half pints of oil instead of four. At the same time the bottom end bearings and crankpin were beefed up.

The factory also continued to produce singles with conventional, valve spring heads. These machines were designated MkIII and the desmos MkIIID. Both versions came in 250, 350 and 450 sizes. Later they were differentiated with contrasting styling and paint schemes; the MkIII became a blue and gold tourer while the desmo turned into a sleek little pseudo racer with single seat and disc front brake. At the same time it lost its MkIIID tag and simply became known as the Desmo. And that is the ultimate from the Ducati single took--the form in which I first got to really know and love Ducati singles.

I had ridden a 250MkIII previously and been amazed by its speed and handling, but when I road tested a 350 Desmo belonging to a Ducati dealer and spares specialist Mick Walker, it turned into a lasting love affair. By the time I'd ridden the 30 miles back to the office after collecting the bike, I couldn't stop telling the other guys how amazing it really was. And after a week I knew that I had to buy one myself. . . I became the proud owner of a 450 Desmo.

No other bike I've ever tested has affected me so much that I just had to rush out and buy one. After all, it's cheaper riding around on someone else's. But what captivated me was the fact that it was so totally and refreshingly different from anything else on the contemporary scene. I've always had a



DUCATI RACING T-SHIRT BREAKS SALES RECORDS

The Racing Shirt above is our newest addition to the DIOC line of t-shirts and if sales for this bright red, black and white number keeps going the way they are you can be assured of the clubs existence for some time to come. The shirt is printed on both sides and is of high quality. \$5.25 + \$125 shpg. and handling and the envelope to ship it in and the label and the time to put it together. . . . You'll love it, guaranteed.