Fast & Loose

Better than your average enduro iron — SWM's 175 is a winner!

Choosing to own a 175 SWM is like marrying a nymphomaniac beauty queen who can't hold any sort of conversation, cook anything other than boiled eggs and who demands £100 a week for clothes.

Such a spouse would be dynamite in bed but what would you do for the rest of the time? *(What 'rest of the time'? — Ed.)*

Excellent stability from straightleg forks

Take the SWM to the special test of a national enduro and you may rest assured that the problem of setting standard time lies entirely with the rider. If he is capable of ISDE speeds, the bike will enable him to achieve them with ease but if he isn't, the SWM can be as much of a hindrance as a help.

All the SWM's I have ridden have been thoroughbred ISDE bikes from first to last and this latest example of the marque continues the family trait with a vengeance. In character, the 175 is far more like the ultimate Grand Prix 125 rather than a soft 250, in the vein of Kawasaki's little KDX175. To get the SWM to perform, it has to be ridden flat against the stop all the time, a fact reflected by the 9500rpm needed to produce the very healthy 35bhp.

The SWM's power plant comes, as always from the Austrian Rotax concern, where the motors are built to SWM's own specification. Without any doubt, the SWM-developed Rotax motors are the best of any in terms of performance but they are also the fiercest — a fact which less-than-expert riders often regret.

The 175 Rotax is unique in that it employs a disc-valve mounted on the lefthand side of the motor. Normally, such a configuration would lead to an unacceptably wide engine for off-road use, so the carburettor is mounted behind the cylinder barrel on a long induction stub.

Despite all the Japanese engineering conjuring tricks, there is still no beating the disc valve for sheer power in a two stroke, for only with this method can truly assymetrical port timing be achieved. Normally, in addition to being very powerful in terms of bhp, the SWM motors also produce a tremendous amount of mid-range urge and I was a little disappointed to find this sacrificed in the case of the 175 in favour of sheer top-end power.

Despite its near road-racing character the SWM was a delight to start. Flick on the enriching lever of the 34mm Del'Orto carb. and one or two prods would fire it up from cold. When hot, the piston barely had to be turned over top dead centre. Unusually for a Rotax, the 175 would also start in gear with the clutch withdrawn. Normally there is too much clutch drag for this to happen.

The gearbox too, was better than most Rotax units, with all six ratios engaging sweetly giving a speed range from almost walking pace to about 85mph. However, because of a concentration of power right at the top of the rev. range, every single revolution had to be squeezed out of the motor before the next higher ratio could be engaged.

Clutchless gear changes were the norm, both for engaging higher and lower ratios, which was just as well since using the clutch was virtually impossible, due to the mammoth effort required. SWM importer, Jock Wilson, tells me that heavy springs are

required to prevent clutch slip on the Rotax's bonded clutch but I just don't believe that a 175 needs a clutch this heavy. Even Team PJ1 member, Colin Jones, who is the bike's regular rider, gives up using the clutch after the first check and he is much fitter than I.

The SWM's handling matches the motor perfectly. Ride it flat out and it is near perfect. Perambulate at lesser speeds and it feels stiff and mis-used: which to be fair to the bike, it is.

Over the hard going of the top part of our test track, the SWM was one of the safest bikes I have ever ridden. It could be hammered into concrete-like corners with complete safety and it gobbled up the deep, solid ripples left by moto-cross bikes as if they were non-existent.

The problems came in the woods where the heavily sprung and damped twin unit rear suspension was not sufficiently responsive to greasy cambers and sodden tree roots to enable the fierce power to be used adequately. Of course, a top class rider would be going so much faster that this would not be a problem but for me, particularly when I got tired, I found the SWM to be very hard work.

Both the straight leg Marzocchi forks which are favoured by SWM in preference to the leading axle design employed by most factories, and the Corte and Cosso rear dampers are widely adjustable but to soften them up for slow going would destroy the bike's high speed virtues. If one rides an SWM then it is essential to accept the bike for what it is.

The bike is very well finished with high quality welds apparent on the distinctive single downtube frame with its widely splayed duplex engine cradle. The cycle parts are also of very high quality with an excellent saddle, well-designed mudguards and sensible, highly serrated footrests. Only the tank — holding a miniscule 1¾ gallons and giving a safe range of only 40 miles — is open to criticism. Many riders would prefer the room taken up by the neat tool area recessed within the tank to be fuel capacity.

Providing the stopping power is a pair of the traditional Grimeca brakes, a 7in. front anchor and a q.d. 6in. unit at the rear. The front Grimeca is normally an outstanding anchor but the awkward run of the cable on the SWM took the edge off its excellence because of the high lever pressure required.

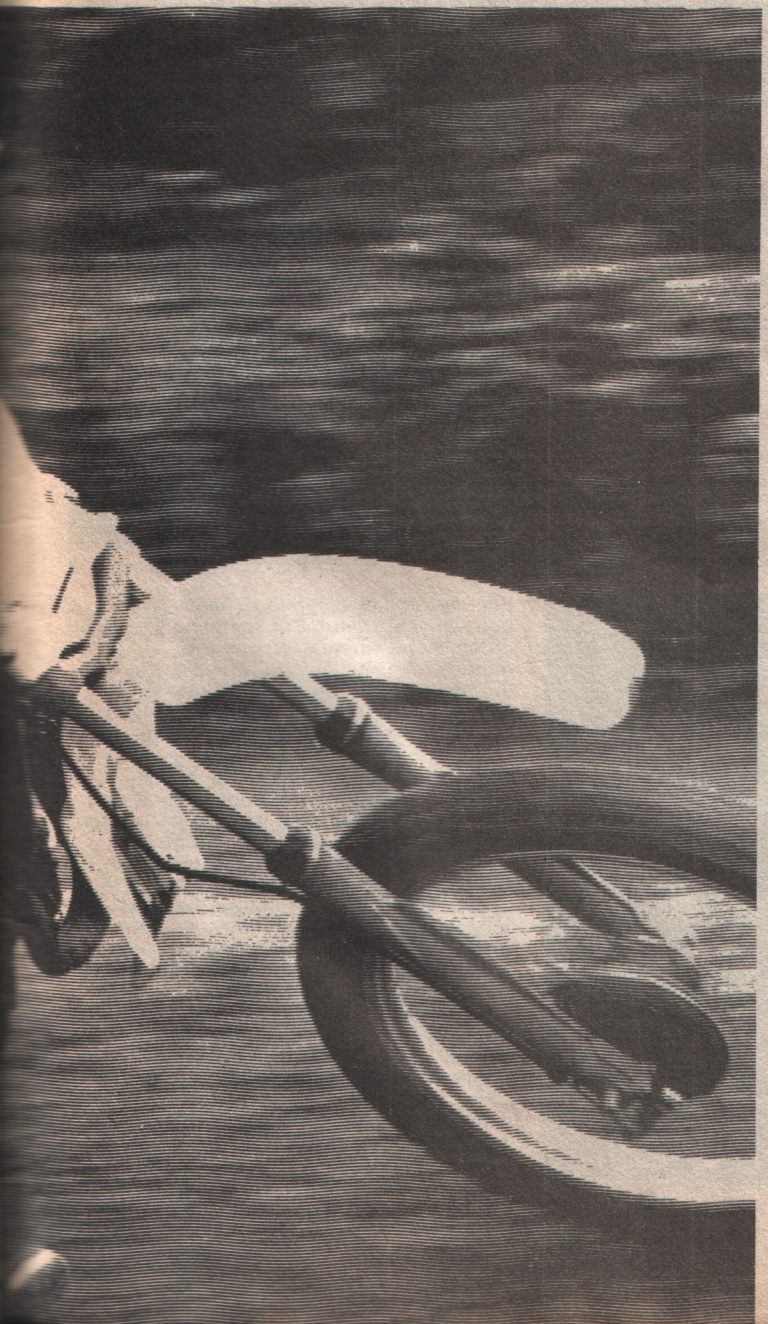
A close study of the bike reveals some really neat touches, pointing clearly to the bike's ISDT heritage. For example, the bike pivots on its centre-stand so that it settles down on to whatever wheel remains when one is removed for a tyre change. There is also a purpose designed flat area on the rear mudguard for storing spare inner tubes — very nice indeed!

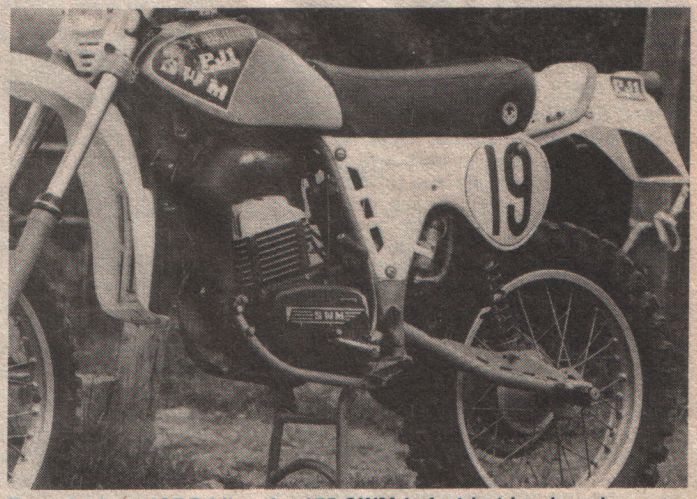
At present, the SWM is one of the definitive answers to winning the 175 class at national enduros but the factory will have to take care. The bike is not easy to ride and its demanding nature makes it hard work. Other factories are producing motorcycles which are in the same speed range and are much more forgiving, particularly on difficult going.

If you don't want to ride in the expert's class, just forget this bike — it will frighten the pants off you and be more trouble than it's worth.

Our thanks to the PJ1 enduro team and to Colin Jones for the loan of the bike.

Frank Melling





Every inch an ISDE bike, the 175 SWM is fast but hard work

TECHNICAL SPECIFICATIONS

Engine

Type: *Single-cylinder two-stroke with disc-valve induction.*
Bore x stroke: *62 x 57.5mm.*
Displacement: *173.6cc.*
Compression ratio: *14.:1.*
Carburettor: *34mm Dell'Orto.*
Claimed max. power: *33bhp @ 9500rpm*
Lubrication: *Petroil pre-mixed at 32:1.*

Transmission

Gearbox: *Six-speed, constant mesh with overall ratio changes made at gearbox or rear wheel sprockets.*
Clutch: *Wet multi-plate with bonded friction plates.*

Frame and Forks

Frame: *Single-tube spine with duplex engine cradle in chrome-moly tubing.*
Front suspension: *Marzocchi straight leg forks giving 10½in. travel.*
Rear suspension: *Twin damper swinging-arm giving 10½in. of travel controlled by Corte and Cosse dampers.*

Trail, suspension and castor angle can all be varied meeting to meeting. During the test, we pulled in the forks on Colin's bike by about a degree.

Wheels and Brakes

Front: *7in. sls Grimeca with 21in. Green Label Akront rim. Tyre Pirelli MT16 3.00 x 21in.*
Rear: *6in. sls Grimeca with 18in. Green Label Akront rim. Tyre Pirelli MT 16 4.60 x 18in.*

Electrics

Generator: *55 watt Bosch flywheel generator powering DC lighting and electronic ignition.*

Dimensions

Seat height: *37in.*
Wheelbase: *57.5in.*
Ground clearance: *12in.*
H/bar. width: *34in.*
Claimed dry weight: *205lbs.*
Fuel tank capacity: *1¾ gallons.*
Price: *£1464 inc. Tax.*
Importers: *SWM UK Ltd., 198 Red Lion Road, Tolworth, Surbiton, Surrey.*