

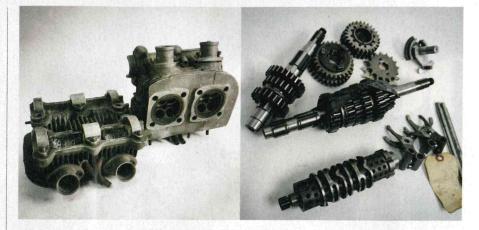
Classic TT will have the enviable opportunity to savour the aural assault of this open-piped Benelli 350 four-cylinder as it shrieks over the Mountain. "The sound of the Benelli is much more exciting than the MV triples and fours," says Rob Iannucci. And he should know – the Benelli is one of the bikes raced by his Team Obsolete, and in a career spanning over 30 years and over 1800 races worldwide, he's raced them all.

isitors to this summer's

This is the 1967 Benelli 350/4 that Renzo Pasolini raced to second place in the 1968 Isle of Man Junior TT. It's returning to its old stomping ground for a thrash around the Mountain on the 'Lap of Honour' at the hands of TT winner and stalwart Team Obsolete rider Dave Roper. Dave has previously raced this very bike to victory at Daytona, but we're getting ahead of ourselves – let's go back to the history of how this howling, lean and green machine came into being...

Making music

When Benelli announced in 1960 that they had built a four-cylinder 250, there were mutterings that it was an inferior copy of the RC160 which Honda had introduced a year earlier. But the small Italian manufacturer didn't need to look to Japan



Cylinder heads are cast in pairs, with four valves per cylinder, while the gearbox is a seven-speeder

for inspiration. Benelli had previously made a 250cc inline four way back in 1939 – liquid cooled and supercharged, it was rumoured to produce 52bhp at 10,000rpm. But Italy's involvement in World War II meant it never raced, and superchargers were banned in Grands Prix after the conflict.

The air-cooled four of 1960, designed by Ingeniere Aulo Savelli, used a 44mm bore and a 40.6mm stroke. Double overhead camshafts were driven by a train of gears spinning between the centre cylinders. There were four separate alloy cylinders with iron liners, but the heads were cast in pairs. A geared primary drive ran on the left side, between the first and second cylinders, with a six-speed cluster and dry clutch. Although the Honda had 16 valves, the Benelli made do with eight – but that didn't stop it spinning to 13,000rpm and developing 40bhp.

It was nearly two years before the Benelli made its race debut at the Shell Gold Cup, Imola in April 1962, when Silvio Grassetti harried Tarquinio Provini on the works Morini single, until he went out with a smoking exhaust after a valve





kissed a piston as he over-revved the engine. Then, in an early season warm-up before the first GP, Grassetti beat Jim Redman and Tom Phillis on their works Honda fours at Cesenatico, a circuit on the Adriatic coast about 40 miles from the Benelli factory at Pesaro. As you would expect, the partisan crowd was ecstatic.

Things were looking even better when new signing Provini beat Redman by 22 seconds after 33 laps of Montjuic Park to take the 1964 Spanish GP, with Phil Read and the disc-valve Yamaha RD56 half a minute behind the Honda.

Although the Benelli factory was strapped for cash, development continued and by 1965 the 250 racer featured a seven-speed gearbox and a shorter, lower and lighter chassis demanded by Provini. The Lucas magneto was swapped for one made in America, where it was usually fitted to speedboat engines. This was located in front of the crankcase and driven directly by the crankshaft via a set of straight and bevel gears. Engine modifications resulted in a power hike to 52bhp at 16,000rpm.

Provini won every race in that year's Italian national championship, but the highlight of the season was when he won a rain-soaked Italian GP at Monza. With 11 of the season's rounds already completed, however, Phil Read had delivered the 250 title to Yamaha with seven wins.



At the same Italian GP Provini wheeled out a 322cc version of the Benelli, achieved by taking the cylinders out to 50mm. He finished third behind Grassetti's Bianchi twin, but a lap behind Agostini and his MV. This bike would form the basis of a new racer for the 1966 season.

The most important change was using four valves per cylinder, with a central spark plug. With a bore and stroke of 52 x 40.6mm the engine had a capacity of 345cc – and it had a seven-speed gearbox. Running with a compression ratio of 11:1, it was claimed to deliver 64bhp at 14,500rpm – impressive stuff, as MV's triple made 63bhp at 13,500.

But after a promising start to the 1966 season, Provini's racing career came to an end when he crashed and broke his back

'BENELLI PROMISED PASOLINI A BIKE TO RATTLE MV AGUSTA'

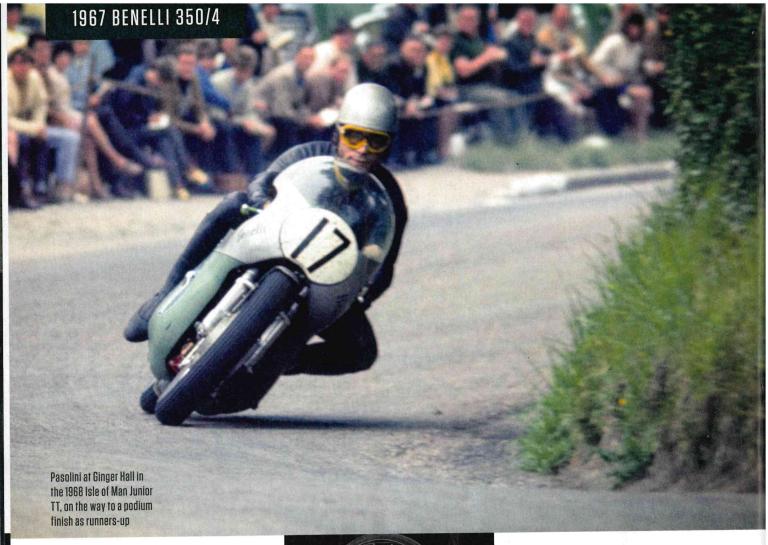
LEFT: Quietly-spoken Pasolini turned into a hard fighter out on the track

during practice for the Isle of Man TT, postponed that year to September because of a seamen's strike. His replacement was the bespectacled Renzo Pasolini.

Renzo Pasolini

Popular 'Paso' had a gentle sense of humour and enjoyed a smoke and a drink; but although he was quiet and unassuming when he wasn't racing, on the track with his distinctive knee-out style he was one of the hardest riders of his generation.

He started racing motocross when he was still a teenager before joining Aermacchi, where he worked in the race department alongside his father, a top ISDT rider. Paso soon got a factory ride in national events, and in 1965 teamed with number one rider Gilberto Milani for the



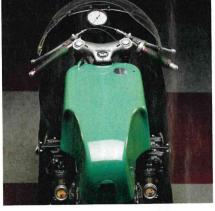
350cc Grand Prix title chase. Their pushrod singles were outclassed by Honda and MV multis, but at the end of the championship Paso was ranked eighth, ahead of Milani. That earned him a promotion to number one rider for 1966, and he finished the year in third place (but way down on points, on a much slower bike) behind Hailwood and Agostini.

Benelli tempted Paso to join them with the promise of a bike that could rattle MV Agusta and it seemed they were right. At the end of 1966, on a bored-out 350, he won the 500 class at Vallelunga, a twisty two-mile track 20 miles north of Rome. Ago fell off trying to pass him.

Full of promise in '67

Having secured third behind Hailwood and Agostini at Hockenheim, Paso's first full season with Benelli in 1967 seemed to be going well, but then the action moved to the Isle of Man. In the Junior, at the end of lap three Hailwood was leading Ago by 2min 3.8sec, and Paso by 4min 50sec. But Paso was well ahead of the rest of the field; if the Honda or the MV gave any trouble and his Benelli held out, he could still win.

But it wasn't to be – his chain broke at Creg-ny-Baa and Hailwood romped home ahead of Ago and Derek Woodman on the 300cc MZ. Paso's only other GP podium that year was a third at Assen behind Hailwood and Agostini.



Honda pulled out of racing at the end of 1967 and Hailwood was handed a substantial sum for agreeing not to ride for another manufacturer in the world championship series.

On the Junior TT podium

In 1968 Paso had his work cut out – he was committed to contesting the 250, 350 and 500cc World Championships.

Agostini was expecting a much easier time, but Paso rattled his nerves with impressive rides in the Temporada Romagnola, the early season Italian street-circuit meetings.

The 350 Benelli was still running strong when Paso began his GP campaign with a second place at the Nürburgring and Ago needed to break the lap record to stay in

152mph THROUGH THE SPEED TRAP

LEFT: A Pasolini's-eye view - no superfluous distractions here!

front. Then it was time to load the bikes on the ferry to the Isle of Man...

Of course, Ago was favourite to win the Junior, but there was little doubt that Paso was in with a chance. Now finished in stylish green and silver colours instead of drab grey, his Benelli was fast – during practice he was timed at 152mph through the Highlander speed trap, only 0.5mph slower than the MV triple.

At 1.30pm the first two riders were flagged off. Agostini, his bike wearing the No 6 plate, started one minute ahead of Pasolini, No 17. But the MV was soon in the lead on corrected time as well as on the road, with an opening lap of 106.03mph. Pasolini did 103.15mph, and he would struggle to go much faster after a six-inch section fell off one of his exhaust

196/ BENELLI 300/4

RIGHT: Four-cylinder engine was recently rebuilt, with new crank, rods, pistons and valves, in the Team Obsolete workshops

pipes. Ago increased his lead before he came in at the end of the third lap, but his pit crew was slow. They took 48 seconds to fuel and check over the triple – Paso was away in 40 seconds after changing his flysplattered goggles for clean ones.

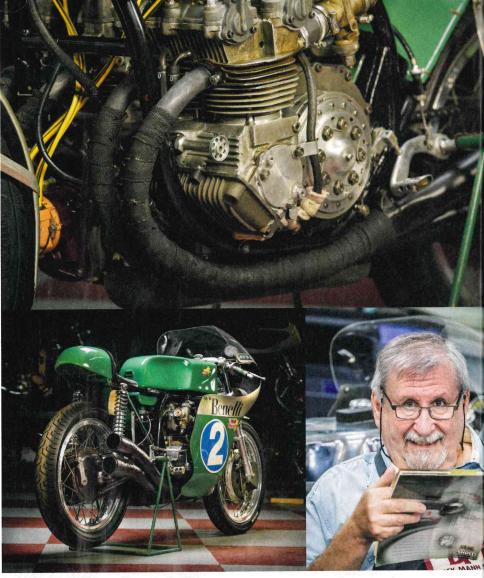
Agostini never really looked under pressure, though, steadily maintaining his lead. Behind him and Paso, riders were pulling out with mechanical problems – only 40 of 86 starters would see the chequered flag. At the end of 226.4 miles it was Ago first, with a new race record of 104.78mph, ahead of Paso (102.65mph) and Bill Smith (Honda, 95.02mph).

Short of money, Benelli didn't contest every round of the 1968 World Championship. Paso's only other 350cc podium place was a second at Monza, which earned him enough points to make him runner-up to Agostini. It would be Pasolini's best season with the 350 Four.

See it for yourself

In the end, the Benelli 350/4 enjoyed a career that lasted almost 10 years – it may never have won a world championship GP in an era dominated by Agostini and MV, but it did push them – and added a different Italian hue to the arena of world championship motorcycle racing.

And as for the sound... well, if you get the chance to go over to the Classic TT this summer, you won't need to look out for it – you'll hear it coming...



The Benelli is raring to roll, in beautiful race-prepared condition

Team Obsolete owner Rob lannucci

Roper will ride the Benelli on the low

DAVE ROPER

Dave Roper, the man who will ride the 350/4 at the Classic TT, was the first American to take a TT victory on the Isle of Man. He won the 1984 Senior Historic on a '59 Matchless G50, averaging 96.114mph over three laps. He has been with Team Obsolete from their inception.

He rode Pasolini's old Benelli racer to victory in the 1993 Daytona 350 Historic GP. Later the same year he crashed it at Kerramoar (about 21 miles from the start) while leading the Junior Classic Manx GP.

"I was going faster than I had been in practice and turned too late, running wide and hitting the bank on the right; I dislocated my right hip while I was still on the bike," recalls Dave. "Then I ricocheted across the road and the last I remember is the hay bale in front of the lamp post. Next thing I was being lifted into the helicopter..."

This was only the second time Team Obsolete had run the Benelli, after the win at Daytona. "I was unsure of the required maintenance intervals, so Roper was limited to 12,000rpm during practice," says team owner Rob lannucci. "After practice, we checked the top end condition, which was found to be excellent. So we raised the redline to 13,500. This was a violation of one of the most important rules of race tuning: test all changes before the race. The increased rpm was transformative, and Roper paid the price."

Dave is probably the only man to have ridden a Honda six, an MV triple and a Benelli four. "All three have light flywheels and gain and lose revs rapidly, but the Honda six is the extreme example of this. It is easy to stall, but easy to fire up again just by letting out the clutch. I guess I'd have to say my favourite of the three is the MV. It pulls the hardest, is lighter than the Benelli, but also the shortest and therefore the liveliest. But I love singles!"

When Dave last raced on the Isle of Man, his beard was a rusty red. Now it's more aluminium oxide – but the need for speed is as fresh as ever. After a recent engine rebuild in the TO workshop, including a new crank, rods, pistons and valves, the 350/4 is ready to ride in the Jurby Festival as well as the Lap of Honour on the Mountain Circuit.