

Your flexible friend

A compliant chassis and advanced electronics steer Ducati's new superbike into calmer waters

DUCATI PANIGALE V4 S

By Michael Neeves
MCN CHIEF ROAD TESTER

Ducati's new £29,995 Panigale V4 S looks after you in a way no other superbike has ever done. Lap after brain-frazzling lap, it encourages you to scare yourself on the brakes, yank the throttle earlier than you'd ever thought possible and lean over further. There's never any sense in it bite, so you can just concentrate on nibbling away at your lap time.

Trackday heaven

We're on our sixth and final session here at its world launch around the fast 'n' technical Vallelunga circuit, near Rome. The Panigale V4 S is as fresh and accurate as it was when it rolled onto the track this morning and through every corner it hooks up with MotoGP Ducati-like poise and stability. On the old Panigale it would be a different story: it would shred its tyres in a few laps, then buck and weave in an attempt to put its 213bhp to the tarmac, leaving its rider knackered.

To say the new Panigale V4 S is easy to ride isn't strictly true because of the huge forces it puts through your body under hard acceleration, braking and cornering, but it's no longer a wild thing to hang on to.

Power has never been a shortcoming, since the V4 was launched in 2018. Its MotoGP-derived engine, complete with twin-pulse firing order and counter-rotating crank delivers bombastic speed and acceleration but using it all has been a different story altogether.

Constant refinements

The Panigale V4 S was refined slightly in 2020, but it took a big step towards civility in 2022 when rider aids and engine maps received a major polish. Suddenly, unlike any Panigale before, especially the recalcitrant V-twin versions, the '22 bike served to flatter. Pit garages at trackdays, especially those fancy multi-day Euro events, started to turn red as Panigale V4 S became the weapon of choice.

The 2025 version is friendlier still thanks to lots of little detail changes and some major ones, too. It is 2kg lighter, there's more space to move



Marvel at that new swingarm

around, thanks to a bigger seat and its reshaped tank is easier to grip on to when you brake and corner. New third-generation Öhlins semi-active suspension is suppler, more controlled and accurate to adjust, new forged aluminium wheels are lighter, its uprated quickshifter is sublime, the taller screen useful for bigger riders and there's more ground clearance, thanks to new footpegs tucked in by 10mm.

Engine mods are simply to get the V4 through Euro 5+ regs, while maintaining its power (it's actually up half a bhp). It's slightly revvier and has less torque (see p30), not that you'd ever notice with a motor oozing so much performance.

Flexi frame and double-sided swingarm

But here at Vallelunga it's clear the Ducati has improved in three major areas. The first and biggest change comes from its new frame and double-sided swingarm, both of which are lighter and have significantly more lateral flex than the previous format. There's more feel and grip at full lean and the chassis is more in tune with the character of stickier, new-generation Pirellis. It comes on Diablo Supercorsa V4 SPs as standard but for the track today we're on Diablo Superbike slicks: SC1 front, SC0 rear.

Crucially, the new Ducati maintains its newfound composure long after the tyres are past their best. Take the 2022 model with its

Continued over



'The biggest change comes from its new frame and double-sided swingarm'

Neeves attempts to overcome the Pani's downforce at Vallelunga

stiffer frame and single-sided swingarm: it won't misbehave on new rubber, but once the grip level drops, which it soon does, it can be a handful when you push hard. The new Panigale is much kinder on its tyres to begin with and when grip fades, it stays as stable and predictable as any conventional Japanese or European superbike.

Not only is this good news for trackday riders, it should assist Ducati superbike teams, too, if the homologation-special Panigale V4 R acquires a similar chassis for 2025 (they've yet to confirm).

Ducati have come to realise chassis flex was the missing part of the Panigale handling jigsaw. As such they've been testing frames and double and single-sided swingarms with different stiffnesses behind closed doors for the past couple of years. Flex has been the key to MotoGP success and it benefits riders of all levels.

MotoGP quick... almost

In this year's 'Race of Champions' at World Ducati Week, MotoGP champ Pecco Bagnaia won, setting a 1:35.051 lap around Misano on a standard 2025 Panigale V4 S with slicks (a second faster than at the same event two years ago on the 2022 bike). Recent Misano MotoGP winner, Marc Marquez set a quickest lap of 1:31.564 on his Ducati GP23 and last place Stefan Bradl did

a 1:34.247 on his development Honda. It's fair to say Ducati have found the magic formula for getting a bike around a track quickly, whether it's a Panigale or a Desmosedici MotoGP rocket.

Rider aid evolution

Electronics are the next big weapon in the new Ducati's armoury. They were cutting edge on the '22 V4 and now they've taken another huge leap forward. As before it has traction, slide, wheelie, launch and engine braking control, served by an Inertial Measurement Unit and powerful ECU. They're even more accurate now, thanks to a new system (Ducati Vehicle Observer) that can predict 70 virtual ground forces acting on the machine. As a result, the rider aids control the V4's power safely and predictably, whether you want to slide your way around a track, or ride with your wheels neatly in line.

Here at Vallelunga, it's just a case of deciding when you want to pull the trigger out of a corner, then hold the throttle against the stop and let the electronics take care of the rest. You never need to worry about what the bike is doing, leaving you to concentrate on where you're going.

With the electronics doing their thing the Panigale resembles a computer game and is a little dead-feeling, until it's upright and frying your speed senses along the



Dial down the electronics and dial up the fun

straights. Twiddling the settings to turn the power up and dial the V4 come alive. It becomes more involving, fun and feels much faster, but doesn't actually improve my lap times. The electronics help a normal rider like me ride fast for longer, but they do take something away from the overall experience.

Trail-braking the rear

Completing the trio of lap time-busting tricks is the V4's new braking system. New Brembo Hypure calipers make their debut on the Panigale and they're every

bit as savage as before, but have improved cooling qualities for consistency. The ABS system now has seven levels, all the way from 'fully safe' ABS for the road, ABS that controls a rear slide into corners when you stamp on the rear brake.

There's also a new 'Race eCBS' system that operates the rear brake for you when you pull the front brake lever to keep the Ducati stable as it rapidly decelerates. Unlike other linked systems, the electronics 'trail-brake' the rear for you with the perfect amount of pressure and keep it there after

you've released the front brake, to help hook the Ducati into a turn. It works brilliantly and is what a MotoGP rider would do naturally. Again, it's one less thing to worry about during a fast lap.

Dream trackday machine

It's impossible to fault the new Panigale V4 S at Vallelunga. It operates at a much higher level than most of us could ever get close to and the way it can now churn out fast, consistent laps with relatively little effort will be an even bigger draw to the dedicated, well-heelied trackday rider.

'Chassis flex is the missing part of the jigsaw'



It stays sharp even after the tyres are past their best



Race eCBS trail brakes for you

TECH SPOTLIGHT

Big changes under the fairings

Desmosedici Stradale V4 Ducati have squeezed the V4 through Euro5+ without losing power. Inlet and exhaust cams are reprofiled and its 213bhp is made 500rpm further up the revs. Torque is 2lb.ft down, peaking 1750rpm higher. Variable length inlet trumpets are shorter at high revs and longer at low rpm. Alternator and oil pump are from the V4 R and gearbox drum from

the Superleggera V4, saving 1kg. Rear cylinders deactivate in town above 75 degrees.

Chassis overhaul

In a bid to give it more feel, grip, stability in every phase of a corner, the aluminium 'front frame' has a massive 40% reduction in lateral stiffness and is 730g lighter. They have also junked the single-sided swingarm in favour of a DHSS (no,

not that one). The 'Ducati Hollow Section Swingarm' has 37% less lateral stiffness and, along with the new wheel assembly and shorter shock, saves 3.8kg.

Weight saving is offset by the new Euro 5+ exhaust and extra electronics. As a result it's only 2kg lighter, but you'll get some of that back and a claimed 225bhp, with Ducati's titanium Akrapovic race system. Yours for £7776...



Meet the Ducati Hollow Section Swingarm



Aero New colour-coded wings create same downforce as before and integrate into the body. Fairing's leading edges are trimmed back to create less drag.



Lighter and more flexible double-sided swingarm and new frame are key to the Ducati's new-found ability to be easier to control, especially when grip fades.



Seat unit is longer and wider to give the rider more room to move around. New-shape tank has a textured base and is easier to grip on to.



Dash Superb new 6.9in colour TFT has an 8:3 aspect ratio, cleaner new graphics and a plethora of easy-to-read information in road and track layouts.



Brakes New Brembo four-piston Hypure calipers are lighter with improved ventilation. You can also spec them in red, yellow, black or gold.

MCN VERDICT
MICHAEL NEEVES
CHIEF TEST RIDER

'Prepare to be flattered'

The Panigale V4 S has evolved into an ultra-polished track weapon. It'll lap faster than the out-going model for racing pros and trackday regulars alike, and is as easy ride as a brain-melting, 213bhp superbike ever can be. It's kinder on its tyres, and its handling and stability stay consistent, even when grip fades. It flatters like never before, which will be mana from heaven for track addicts. It'll be friendlier on the road, too, but you'll only be able to use a fraction of its superpowers at normal speeds. If you want to go very fast with an army of perfectly judged electronic riders aids, it won't disappoint.

THE FACTS

£29,995

Ducati Panigale V4 S

Engine	1103cc, liquid-cooled 8v, V4
Frame	Aluminium 'front frame'. Engine is a stressed member
Suspension	Ohlins NPX 25/30 43mm gas forks and TTX36 shock. Adjustable preload, semi-active damping
Front brake	2x 330mm discs with four-piston Brembo Hypure monobloc radial calipers. Race ABS
Rear brake	245mm rear disc with twin piston caliper. Race ABS
Seat height	850mm

213 bhp
89 lb.ft
187 kg (dry)
17 litres