

RUBBER EXCITEMENT

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Pirelli's new Angel GT may be sports touring by name but its race-track DNA lurks just below the surface

Most car drivers view tyres as round rubber black things which need to be paid for in order to obtain a pink slip. For bike riders though, tyres are an integral piece of the motorcycle riding package. Along with leathers, helmets, gloves and boots, tyres are a piece of safety and performance equipment. When the time comes to fit new hoops there's a wide range of choices and a lot of information to digest, usually in a short period of time.

The dilemma for tyre manufacturers is to find ways to educate the consumer on its constantly changing product list without making it a snooze fest. Let's face it, unless you're in the market, tyre talk can be about as exciting as a parliamentary speech.

This is where we earn our keep. We are information filters entrusted with the job of turning often boring facts and stagnant information about compounds, tread patterns and sidewalls into something interesting.

We attend official tyre launches, sit in darkened rooms and watch slide shows on new technology and how it is applied to an object which ultimately hasn't changed its design - it will always be black, it will always be round and it will always be available in a particular size.

After digesting reams of facts and figures we do our best to regurgitate it as entertaining and informative content. But most of us are an immature bunch with short attention spans (some worse than others), so the education process also needs to have a practical element involving internal combustion on a closed circuit.

So that's exactly what the Pirelli distributor did when the brand's new Angel GT sports touring tyre lobbed on Aussie shores, destined for the competitive

Australian market place. Morgan Park Raceway in Warwick, Queensland, is the chosen test track, as well as a 300-kilometre scenic road ride linking Pirelli HQ and the circuit, and a wide selection of sports touring motorcycles, the internal combustion we'd need to turn mundane theory into appealing and useable information.

Off we set in perfect conditions on our chosen machines; each fitted with a brand

new pair of Pirelli Angel GT hoops. We headed inland through Beaudesert and Boonah, cruising the twisting and turning roads. We swapped bikes and talked tyres before riding on to Warwick, where the 3.1km Morgan Park circuit awaited.

Sure, it was a great excuse to thrash a few bikes around a race track, but we also learned, despite being a sportstouring tyre, it has plenty to offer a wide range of bikes.



Pirelli's new Angel GT Sport Touring tyre

RELL

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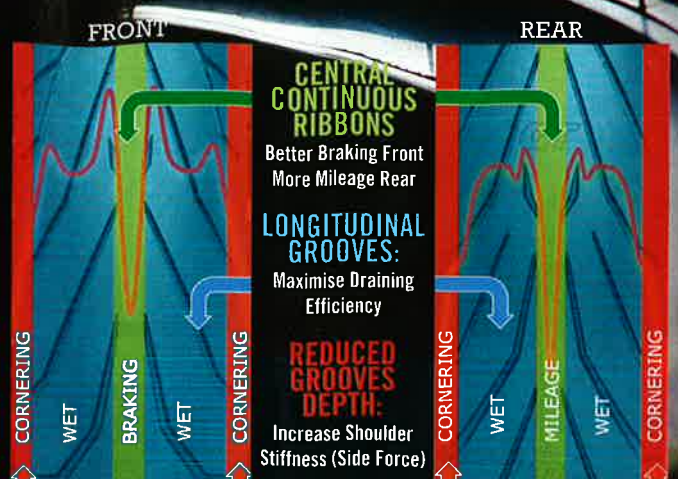
When it comes to digesting tyre information, a practical demonstration works best



BETTER FLOW CONTINUITY
2 grooves in 1

OPTIMIZED DIRECTION
2 grooves in 1

CONTINUOUS GROOVES



BALANCING GRIP AND DURABILITY

The sports-touring segment is a tough-nut for tyre manufacturers to crack, because the term applies to a wide range of bikes. Everything from naked machines through to heavy tourers and powerful muscle cruisers fall into the sports-touring category. Take away supersport bikes at one end and cruisers at the other, and just about everything in-between is a target market for the new GT.

A sports-touring tyre must have durability and grip in equal measure, two words as compatible in the world of tyres as chops and celery. Grip requires a fast wearing, soft rubber compound, while durability is generally achieved from using a harder rubber compound.

Shape is also important, a more rounded tyre crown increases side-wall grip but reduces longevity, while a flat bottom takes away the tyre's sport performance ability.

Getting all the components just right for the tyre set to replace the outgoing Angel ST is the delicate balancing act which challenged Pirelli engineers for two years. The goal was to produce a tyre for everyday commuters, weekend free-timers and touring riders, all wrapped into the one hoop.

The starting point for the Angel GT design team was a World Superbike Championship derived carcass. The stiffer unit reduces flex under load and tyre expansion at high speed.

A new multi-radius profile increases the achievable lean angle by five percent over the existing Angel ST tyre.

Pirelli also developed new rubber compounds for the GT project using specialised mixing processes and polymers. The front tyre is 100 percent silica while the rear is a bi-compound comprising 100 percent silica on the shoulders and 70 percent silica in

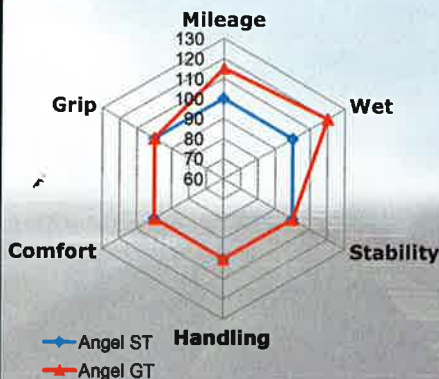
the centre for increased durability. The centre layer also runs underneath the side wall compound improving stiffness.

The ST's tread pattern also received a make-over for application on the GT. Computer-designed grooves decrease the size and number of cuts required, while increasing the size of the contact patch, durability and wet-weather performance.

The centre of the GT is basically a slick, improving braking and rolling efficiency, while the shoulders have a decreasing tread depth toward the outer edges, an area used mostly in dry weather.

The GT's contact patch is six percent shorter and 14 percent wider than the Angel ST, reducing slip and heat. The area in contact with the road has increased by eight-percent and the patch remains consistent from the centre to side wall as lean angle increases.

ANGEL GT GOALS



Performance goals for the Angel GT were to improve wet-weather performance and increased durability while retaining grip and comfort levels. The spider graph illustrates this has been achieved without sacrificing grip.

In some areas, the Angel GT is up to 20 percent better than the Angel ST tyre it replaces.

In a recent independent tyre test conducted by Motorrad Test Centre, the Angel GT ranked number one for mileage in the sports-touring tyre segment.

SIZES AND PRICES

A full range of 17-inch radials are available, as well as a 110/80 and 120/20-18-inch front tyre, and a 160/60 18-inch rear tyre.

The letter A denotes a two-ply carcass for

improves stability on heavier bikes.

Pricing for the new GT Angel is the same as the ST it replaces. Fronts \$199, and rears \$279.

RIM	SIZE
17	120/60 ZR 17 M/C (55W) TL
	120/70 ZR 17 M/C (58W) TL
18	110/80 ZR 18 M/C (58W) TL
	120/70 ZR 18 M/C (59W) TL



RIM	SIZE	NOTES
17	150/70 ZR 17 M/C (69W) TL	
	160/60 ZR 17 M/C (69W) TL	
	170/60 ZR 17 M/C (72W) TL	
	180/55 ZR 17 M/C (73W) TL	
	180/55 ZR 17 M/C (73W) TL (A)	2 ply carcass for improved stability
	190/50 ZR 17 M/C (73W) TL	
	190/50 ZR 17 M/C (73W) TL (A)	2 ply carcass for improved stability
18	190/55 ZR 17 M/C (75W) TL	
	190/55 ZR 17 M/C (75W) TL (A)	2 ply carcass for improved stability
	190/55 ZR 17 M/C (75W) TL (D)	OE on Ducati Multistrada GT
	160/60 ZR 18 M/C (70W) TL	

PERSONALISE YOUR PIRELLIS

A nice touch at the Australian launch of the Pirelli Angel GT was the personalised labels on each tyre. Purchasers of a selected range of Pirelli tyres, including the Angel GT, can log into the Pirelli web page and design their own personalised label.

Each kit contains six labels, instructions and all the necessary material to make your tyres truly unique.

For more information visit www.pirelli.com.au



A big bike fitted with sports-touring tyres handled track duties

The Suzuki had sat idle through the first session. Within a lap, the foot-peg was gouging the bitumen

TRACK TALK

The new Angel GT tyres were always going to perform well on the 300km road test to Warwick. Three enjoyable hours of riding in warm, sunny conditions on roads restricted to 100km/h was far from an evaluation test. But out on the three-kilometre Morgan Park circuit we were encouraged to let loose and see how much pure sport-riding punishment the new sport-touring tyre could cope with.

In true motorcyclist style the three designated sighting laps degenerated into a full-on race from about the third corner. Despite having no idea which way the circuit went, it was a case of go fast or be left behind.

I chose the lightweight Husqvarna Nuda 900R for the first session. With a mere 1000 metres of tyre warm-up and circuit knowledge under my belt, I barrelled through the superfast ride-hand sweeper and into the tight right-left chicane without the slightest hint of slip from the tyres. At the end on the main straight, I put all my faith in the front tyre as the incredibly grabby front Brembo calipers bit hard into the rotors. I felt the rear wheel lift off the deck and start skipping around wildly, but the front didn't give an inch. Ten more laps at ever increasing speed failed to produce any noticeable fall in grip.

Returning to the pits I put the lack of tyre degradation down to the light weight of the Nuda and decided to jump on the big 250kg Suzuki GSX1250F for another run.

The Suzuki had sat idle through the first session meaning the tyres were stone cold. Within a lap, I had the big bike cranked over so far that the foot-peg gouged the bitumen and showered an impressive trail of sparks through the sweeping left hander. Attacking the fast right hand sweeper through the circuit's new section at 170 km/h again failed to raise any howls of protest from the tyres. At the conclusion of the 15-minute run, the tyres appeared more or less as fresh as when we arrived.

Sessions on the Honda VTR and nimble CBR 600RR were just as impressive.

It wasn't until the sun dipped below the horizon, causing the track temperature to plummet, that any real loss of grip was felt.

Back in the pits everyone joked about turning up for a track day with a set of Angel GT tyres on a supersport machine to lull everyone into a false sense of security, before blowing them all away.

The Pirelli racetrack DNA certainly runs strong right through its range of tyres, including the new Pirelli Angel GT. 🏍️



SHARED TECHNOLOGY ACROSS THE RANGE

Pirelli's Breuberg factory in Germany produces 10-million tyres per year. It also houses Pirelli's race and development team responsible for the World Superbike Championship Diablo slick racing tyre as well as the Diablo Supercorsa, Rosso Corsa, Rosso II and Night Dragon range.

All tyres produced at the factory, regardless of their intended use, share the same manufacturing process. This allows technology and development to flow freely down the line, evident in the Angel GT's WSBK derived carcass.

The Breuberg facility also house Pirelli's modular integrated robotic system manufacturing process (MIRS) which reduces the manufacturing phases from the traditional 14 down to just three. Every tyre is individually cured, physically checked and balanced by hand.